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The use of Nearpod as a tool in teaching English grammar to EFL University students.

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DEDICATION

To my dear family, especially my parents, for their support and for always being by my side every step of this academic journey. Thank you for your love and confidence in my abilities.

To my grandmother, Petra Victoria Sánchez, who though no longer with us, continues to be an example of strength and wisdom. Her advice and spirit inspire me every day to keep moving forward and not give up.

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Development and Validation of a Writing Diagnostic *The use of Nearpod as a tool in teaching English grammar to EFL University students*

Abstract

In recent years, the use of technology in education has resulted in important changes to teaching approaches across a variety of disciplines, including language learning. Educators, particularly in English as a Foreign Language (EFL), are increasingly investigating innovative techniques to engage and improve learning results among university students. Gamification is one such strategy that is gaining attention, as it uses game design aspects in non-game environments to inspire and stimulate learners. The research approach for this study employs an explanatory sequential design within a quantitative framework to study the use of Nearpod as a gamification tool in teaching English grammar to A2-level EFL university students at the University of Babahoyo. The results showed that the differences were high among pre- and post-test, due to Nearpod intervention in the course of the study. In the pre-test the mean is 3,33 and St. Dev. 2,97, while in post-test it was obtained a mean of 7,8 and St. Dev. of 2,43 giving a difference of 4,46 points in the student's average grades, and increasing the grades in 57,31%. To sum up, the results from this study underscore the efficacy of Nearpod as a tool for enhancing student performance and satisfaction in English grammar classes. The significant improvements observed in test scores, coupled with the overwhelmingly positive feedback from students, suggest that Nearpod is a valuable asset in modern language instruction, capable of transforming traditional learning environments

into dynamic, interactive spaces that promote deeper understanding and engagement.

Keywords: Gammification, grammar, tool, technology, Nearpod.

Resumen

En los últimos años, el uso de la tecnología en la educación ha dado lugar a cambios importantes en los enfoques de enseñanza en una variedad de disciplinas, incluido el aprendizaje de idiomas. Los educadores, particularmente en inglés como lengua extranjera (EFL), están investigando cada vez más técnicas innovadoras para involucrar y mejorar los resultados de aprendizaje entre los estudiantes universitarios. La gamificación es una de esas estrategias que está ganando atención, ya que utiliza aspectos de diseño de juegos en entornos no lúdicos para inspirar y estimular a los estudiantes. El enfoque de investigación para este estudio emplea un diseño secuencial explicativo dentro de un marco cuantitativo para estudiar el uso de Nearpod como herramienta de gamificación en la enseñanza de gramática inglesa a estudiantes universitarios de EFL de nivel A2 en la Universidad de Babahoyo. Los resultados mostraron que las diferencias fueron altas entre la prueba previa y posterior, debido a la intervención de Nearpod en el transcurso del estudio. En la prueba previa, la media es 3,33 y St Dev, 2,97, mientras que en la prueba posterior se obtuvo una medida de 7,8 y Dev de 2,43, lo que supone una diferencia de 4,46 puntos en la nota media de los alumnos, aumentando la nota un 57,31%. En resumen, los resultados de este estudio subrayan la eficiencia de Nearpod como herramienta para mejorar el rendimiento y la satisfacción de los alumnos en las clases de gramática inglesa. Las mejoras significativas observadas en las puntuaciones de los exámenes junto con la respuesta abrumadoramente positiva de los alumnos, sugieren que Nearpod es un activo valioso en la enseñanza

de lenguas modernas, capaz de transformar los entornos de aprendizaje tradicionales en espacios dinámicos e interactivos que promueven una comprensión y un compromiso más profundo.

Palabras claves: Gamificación, gramática, herramienta, tecnología, Nearpod.

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Introduction

In recent years, the use of technology in education has resulted in important changes to teaching approaches across a variety of disciplines, including language learning. Educators, particularly in English as a Foreign Language (EFL), are increasingly investigating innovative techniques to engage and improve learning results among university students. Gamification is one such strategy that is gaining attention, as it uses game design aspects in non-game environments to inspire and stimulate learners.

This thesis explores the application of Nearpod as a gamification tool in teaching English grammar to A2-level students at the University of Babahoyo. Nearpod is a multimedia educational platform that enables teachers to create interactive lessons incorporating quizzes, polls, videos, and simulations, thereby improving active student participation and personalized learning experiences. By using gamified elements such as points, leaderboards, and challenges within Nearpod lessons, instructors aim to create a dynamic and motivating learning environment for grammar acquisition.

Considering that grammar instruction often necessitates a balance between explicit rules and meaningful practice, requiring innovative strategies to sustain student engagement and comprehension. Gamification, as implemented through platforms like Nearpod, holds promise in addressing these challenges by enhancing student motivation, promoting active learning, and providing immediate feedback—all important factors in language acquisition (Deterding, Dixon, Khaled, & Nacke, 2011; Hamari, Koivisto, & Sarsa, 2014).

Furthermore, the University of Babahoyo serves as a relevant context for this research due to its commitment to enhancing teaching practices and improving student learning outcomes in EFL education. By investigating the effectiveness of Nearpod as a gamification tool specifically tailored to the needs of A2 level students, this study aims to contribute empirical evidence to the growing body of literature on gamified learning environments in language education.

This thesis explores the potential of Nearpod as a gamification tool in teaching English grammar to EFL university students at the A2 level. By examining its impact on student engagement, motivation, and grammar proficiency, this research seeks to inform pedagogical practices and contribute to the ongoing discourse on effective language teaching methodologies.

The challenge of effectively teaching English grammar to EFL (English as a Foreign Language) students, particularly those at the A2 level, has been a persistent issue in language education. A2 level learners, according to the Common European Framework of Reference for Languages (CEFR), are at a basic proficiency stage where they can understand and use simple sentences and expressions related to familiar topics. However, these students often struggle with grasping the complexities of English grammar, which requires not only understanding the rules but also applying them correctly in various contexts.

Traditional teaching methods, which often rely on rote memorization and repetitive exercises, have been found to be insufficient in sustaining student engagement and promoting meaningful learning. The lack of motivation, coupled

with the monotonous nature of grammar instruction, can lead to low participation rates, reduced comprehension, and ultimately, poor academic outcomes. This problem is particularly pronounced in the context of the University of Babahoyo, where students come from diverse backgrounds, including urban and rural areas, each bringing their own set of challenges and learning needs.

The core issue this research seeks to address is the inefficacy of traditional grammar teaching methods in engaging A2 level EFL students at the University of Babahoyo, leading to suboptimal grammar acquisition and retention. Despite the efforts made by educators to improve grammar instruction, students at this proficiency level often find grammar lessons unengaging and difficult to relate to real-life language use. This disengagement can result in students failing to achieve the desired levels of grammar proficiency, which is essential for advancing their overall English language skills.

The implementation of technology-driven solutions, such as Nearpod, which incorporates gamification elements, presents a potential solution to this problem. However, there is a lack of empirical research specifically investigating the effectiveness of such tools in the context of EFL grammar instruction for A2 level students. Thus, the central research question emerges: "How does the implementation of the Nearpod App impact the development of grammar skills among A2-level students at the Language Center of the University of Babahoyo?"

This research is justified by the pressing need to enhance the effectiveness of English grammar instruction for A2 level EFL students, particularly within the

context of the University of Babahoyo. Given the diverse educational backgrounds of the students, with many hailing from rural areas where access to quality language education may be limited, there is a critical need for innovative teaching approaches that can bridge these gaps. The integration of Nearpod as a gamification tool is supported by its ability to create interactive and engaging learning experiences, which are essential for maintaining student interest and motivation in grammar lessons. Gamification has been shown to enhance learning outcomes by making educational content more engaging and accessible, thereby increasing student participation and retention rates (Hamari, Koivisto, & Sarsa, 2014). Moreover, the use of technology in education aligns with global trends toward digital learning, making this research relevant not only within the local context of Babahoyo but also in broader discussions on the future of language education. By providing empirical evidence on the effectiveness of Nearpod in improving grammar proficiency, this study aims to contribute to the body of knowledge on EFL teaching methodologies, offering practical insights for educators and policy-makers seeking to enhance language education practices.

The selected thesis topic, which explores the use of Nearpod as a gamification tool in teaching English grammar to A2-level students, is closely aligned with the research lines of the Universidad Bolivariana del Ecuador. This research falls under the university's broader commitment to innovative educational methodologies and the enhancement of learning through technology. The university has emphasized the need for integrating cutting-edge digital tools in its educational

framework, particularly those that can improve student engagement and learning outcomes in language acquisition.

This proposal specifically addresses the university's focus on developing and applying technology-enhanced learning environments that cater to the diverse needs of its student population. By examining how Nearpod, as an interactive and gamified platform, can be utilized to enhance English grammar instruction, the research contributes directly to the university's strategic goal of leveraging digital tools to advance educational practices. The emphasis on gamification aligns with the university's research line that promotes dynamic, student-centered learning environments. Furthermore, the study's focus on improving the educational experiences of A2-level students, many of whom come from both urban and rural backgrounds, supports the university's mission to provide equitable and quality education to all its students.

In essence, this thesis not only aligns with the Universidad Bolivariana del Ecuador dedication to innovative pedagogy but also extends its research focus by providing empirical evidence on the practical application of Nearpod in the classroom. This research is poised to offer valuable insights that can be scaled and adapted to other educational contexts, thereby contributing to the university's broader educational objectives.

Research aim

To assess the effectiveness of Nearpod as a gamification tool in enhancing English grammar learning among A2 level students at the University of Babahoyo.

Specific research objectives

- To explore the impact of Nearpod's gamified lessons on student engagement levels during English grammar instruction.
- To analyze the influence of Nearpod's gamification features on student motivation in learning English grammar.
- To measure the improvement in English grammar proficiency among A2 level students following the use of Nearpod as a gamification tool.

The independent variable in this research is the application of Nearpod as a gamification tool in teaching English grammar. Conceptually, Nearpod is an educational platform that allows teachers to design and implement interactive, multimedia-rich lessons that engage students through gamified elements such as quizzes, polls, and interactive activities. The use of these elements is intended to create a more engaging and motivating learning environment, particularly for A2-level EFL students, who may struggle with traditional grammar instruction. Operationally, this variable will be measured by the frequency and types of Nearpod features used in the classroom, as well as student interaction data generated by the platform.

The first dependent variable is the English grammar proficiency of A2-level students. Conceptually, grammar proficiency refers to the students' ability to accurately use and understand English grammar rules in various contexts, including both written and spoken communication. Operationally, this variable will be assessed through pre-test and post-test grammar assessments, error analysis in student writing and speaking, and student self-assessments. The aim is to determine whether the use of Nearpod as a gamification tool leads to measurable improvements in students' grammar skills.

The second dependent variable is student engagement and motivation. Engagement refers to the level of active participation, attention, and involvement that students demonstrate during grammar lessons, while motivation pertains to the intrinsic drive to learn and improve their language skills. Operationally, engagement will be measured by tracking attendance, participation rates, and classroom behavior during Nearpod lessons. Motivation will be assessed through student surveys, feedback forms, and teacher observations, both before and after the implementation of the Nearpod-based lessons. This variable is important as it will help determine whether the gamification elements in Nearpod have a significant impact on students' willingness to learn.

The research will adopt quantitative methodology to provide a comprehensive analysis of the effectiveness of Nearpod as a gamification tool in teaching English grammar to A2-level students at the University of Babahoyo. This approach is particularly suitable for this study as it allows for the triangulation of data, providing both numerical evidence of changes in grammar proficiency and a

deeper understanding of student engagement and motivation. The quantitative aspect of the research will primarily involve a pre-test and post-test design. This will be used to measure the impact of Nearpod on students' grammar proficiency. Fifty A2-level students from the University of Babahoyo will participate in this component of the study. The pre-test will assess students' initial grammar knowledge, serving as a baseline.

After the intervention, which consists of a series of grammar lessons delivered through Nearpod, a post-test will be administered to evaluate any changes in grammar proficiency. Statistical analyses will be conducted to compare the pre-test and post-test results, determining the effectiveness of the Nearpod intervention. Then, it focuses on understanding students' perceptions and experiences with Nearpod, as well as their engagement and motivation levels. This will be explored through surveys administered to a larger sample of 286 students, encompassing a broader range of perspectives. Additionally, the instruments that will be used are:

- **Pre-Test:** The pre-test will consist of a grammar proficiency test tailored to the A2 level, covering key grammatical concepts that the students are expected to know at this stage. The test will be designed to evaluate students' understanding and application of English grammar rules in both written and oral formats. This test will serve as a baseline to measure the students' initial grammar skills before the intervention.
- **Intervention Using Nearpod:** Over the course of four weeks, the 50 students will participate in grammar lessons delivered via Nearpod. These lessons will include interactive activities such as quizzes, polls, and

simulations that are designed to reinforce grammar concepts in an engaging manner. Each Nearpod session will focus on different aspects of grammar, ensuring comprehensive coverage of the A2 curriculum.

- **Post-Test:** Following the Nearpod intervention, students will take a post-test similar in structure to the pre-test. This test will measure the same grammatical concepts to assess any improvements in the students' proficiency. The results of the post-test will be compared with the pre-test scores to determine the effectiveness of the Nearpod-based lessons.
- **Student Perception Survey:** The survey will be administered to 250 students who have experienced Nearpod-based grammar lessons, including the 50 students who participated in the pre-test and post-test study. The survey will include both closed-ended questions, using Likert scales to gauge student perceptions of engagement, motivation, and overall satisfaction with the Nearpod lessons, and open-ended questions to capture detailed feedback on their learning experiences.
- **Survey Implementation:** The survey will be distributed electronically to ensure wide participation. Students will be asked to reflect on their experiences with Nearpod, specifically how the gamification elements influenced their learning of English grammar. The survey will also seek to identify any challenges or limitations students encountered while using the platform.
- **Data Analysis:** The quantitative data from the closed-ended questions will be analyzed statistically to identify trends and general levels of student

satisfaction. The qualitative responses from the open-ended questions will be coded and analyzed thematically to uncover deeper insights into students' experiences and perceptions.

The primary beneficiaries of this research are the A2-level English as a Foreign Language (EFL) students at the University of Babahoyo. These students stand to gain from an enhanced learning experience that leverages gamification through the Nearpod platform, potentially leading to improved grammar proficiency and a more engaging and motivating classroom environment. By addressing the specific challenges that A2-level students often face in grammar acquisition, this study aims to provide them with more effective and enjoyable learning opportunities.

Secondary beneficiaries include the English language instructors at the University of Babahoyo, who will be equipped with innovative teaching tools and strategies that can be integrated into their existing curriculum. The insights gained from this research could help these educators better meet the diverse needs of their students, particularly those from rural backgrounds or with limited access to educational resources. Additionally, the findings of this study could benefit educational administrators and policymakers by providing evidence-based recommendations for integrating technology into EFL instruction, thereby contributing to the overall enhancement of educational practices at the university.

On a broader scale, the research could benefit the academic community by contributing to the existing body of knowledge on the use of gamification and technology in language education. Other universities and educational institutions

may also adopt similar approaches based on the outcomes of this study, thereby extending the benefits to a wider audience of students and educators.

This research is set within the context of the University of Babahoyo, an institution that serves a diverse student population, including individuals from both urban and rural areas. The university is committed to improving its educational practices and ensuring that students receive a quality education that prepares them for future opportunities. The students involved in this study are at the A2 level of English proficiency according to the Common European Framework of Reference for Languages (CEFR), indicating that they are in the early stages of their language learning journey.

The university's commitment to innovative teaching methodologies and the integration of technology in education aligns with the research objectives of this study. The Language Center at the University of Babahoyo, where the research will be conducted, is focused on enhancing English language instruction through modern pedagogical approaches. This research context is particularly relevant given the university's focus on improving student engagement and learning outcomes, making it an ideal setting to explore the potential of Nearpod as a gamification tool in EFL instruction.

The practical contributions of this proposal are significant, both in terms of educational practice and social impact. Firstly, this research aims to provide concrete evidence on the effectiveness of Nearpod as a gamification tool in improving English grammar proficiency among A2-level EFL students. By

demonstrating the potential benefits of gamified learning, the study could lead to the broader adoption of Nearpod and similar platforms in language education, thereby enhancing the overall learning experience for students.

From a pedagogical perspective, the research could offer valuable insights into how technology and gamification can be effectively integrated into EFL instruction. This could help educators move beyond traditional, often monotonous, grammar teaching methods and adopt more dynamic and interactive approaches that better engage students. The study's findings could also inform teacher training programs, equipping future educators with the skills and knowledge needed to implement gamified learning tools in their classrooms.

The importance of this research extends to its social implications. In a context where many students come from rural areas with limited access to quality educational resources, innovative approaches like gamification can play an important role in leveling the playing field. By providing a more engaging and effective learning environment, this research could help bridge educational gaps and promote equity in language education.

Chapter 1: Literature Review

This literature review section examines existing research and theoretical perspectives relevant to the use of Nearpod as an educational tool for teaching English grammar to A2 level EFL students at the University of Babahoyo. This section explores the theoretical frameworks underpinning language learning, the evolution and impact of technology in EFL instruction, and the specific features and benefits of Nearpod in enhancing grammatical competence.

1.1. Theoretical Background

Mastery of grammar rules is essential for effective communication, as it facilitates both the comprehension and production of language (Ellis, 2006). In the context of English as a Foreign Language (EFL) education, grammar instruction help learners develop the accuracy and fluency necessary for proficient language use. According to Larsen-Freeman (2001), understanding grammar helps learners make sense of linguistic input and contributes to their overall language competence.

1.1.1. Importance of grammar in English language learning

Traditional methods of teaching grammar often involve explicit instruction, rote memorization, and repetitive exercises, which can be tedious and disengaging for students. These conventional approaches may not cater to the diverse learning styles and needs of contemporary EFL students, particularly at the A2 level, where learners are still developing their foundational language skills (Ur, 2012). As a result, there is a growing need for innovative teaching tools that can enhance the learning experience and improve grammatical competence.

Technology integration into education has been raised as a promising solution to address these challenges. Educational technologies, such as interactive software and digital platforms, offer new ways to present and practice grammar that can increase student engagement and motivation (Chapelle & Jamieson, 2008). Among these technological innovations, Nearpod is a versatile tool combining multimedia content, interactive activities, and real-time feedback, making it a valuable asset for EFL educators.

Nearpod allows teachers to create and deliver interactive lessons that incorporate a variety of multimedia elements, such as videos, quizzes, and polls. This multimodal approach not only caters to different learning preferences but also promotes active participation and collaboration among students (Bachmair, Pachler, & Cook, 2009). By using Nearpod, teachers can create a dynamic and immersive learning environment that facilitates the acquisition of grammar more engagingly and effectively.

1.1.2. Overview of traditional methods of teaching grammar

Traditional methods of teaching grammar have long been characterized by explicit instruction, rote memorization, and repetitive exercises. These approaches often focus on the direct teaching of grammatical rules, followed by structured practice through drills and written exercises. For instance, the Grammar-Translation Method, one of the oldest and most traditional methods, emphasizes the direct translation of sentences between the target language and the learners' native

language, highlighting grammatical accuracy over communicative competence (Richards & Rodgers, 2001).

Another common traditional method is the Direct Method, which, although more communicative in nature, still involves substantial teacher-centered instruction and the explicit teaching of grammar through repetition and memorization. This method encourages oral practice and the use of the target language exclusively in the classroom, but it often lacks context and meaningful use of language (Larsen-Freeman & Anderson, 2011).

These traditional methods have been criticized for their limited engagement and failure to address the diverse learning styles and needs of students. Harmer (2007) notes that such approaches can be monotonous and disengaging, potentially leading to student demotivation. Moreover, they often do not provide sufficient opportunities for meaningful communication, which is essential for language acquisition. Despite these criticisms, traditional methods remain prevalent in many EFL classrooms due to their straightforward implementation and clear structure.

1.1.3. Technology in Education

The integration of technology in education has revolutionized the way teaching and learning processes are conducted, offering new possibilities for enhancing educational outcomes. Educational technology, often referred to as EdTech, encompasses a wide range of digital tools and resources designed to facilitate learning and improve educational experiences (Selwyn, 2011). These technologies include interactive whiteboards, online learning platforms,

educational apps, and multimedia resources that cater to different learning styles and needs.

In the context of language education, technology has been particularly impactful. Computer-Assisted Language Learning (CALL) emerged as a significant field of study in the late 20th century, emphasizing the use of computers to support language learning and teaching (Chapelle, 2001). CALL applications range from language learning software and online courses to interactive games and virtual reality environments, all designed to provide immersive and engaging language practice.

One of the key benefits of incorporating technology into education is its ability to create interactive and student-centered learning environments. For instance, multimedia resources such as videos, animations, and interactive exercises can make learning more engaging and accessible, catering to visual and auditory learners (Mayer, 2009). Additionally, technology allows for the personalization of learning experiences, enabling students to progress at their own pace and receive immediate feedback, which is important for effective language acquisition (Beatty, 2010).

Moreover, technology facilitates collaborative learning and communication, essential components of language education. Online discussion forums, social media platforms, and collaborative tools such as Google Docs enable students to interact with peers and teachers, practice language skills in real-life contexts, and receive constructive feedback (Warschauer & Healey, 1998). These

interactive elements promote a more dynamic and engaging learning environment, promoting active participation and deeper learning.

In recent years, mobile learning (m-learning) has gained popularity, driven by the widespread use of smartphones and tablets. M-learning provides flexibility and convenience, allowing students to access learning materials and engage in language practice anytime and anywhere (Kukulska-Hulme, 2009). This accessibility is particularly beneficial for EFL students, who often need additional practice outside the classroom to reinforce their learning.

1.2. Theoretical Framework

This section informs into key educational theories that underpin language learning and technology integration, offering insights into how these theories can enhance grammar instruction.

1.2.1. Constructivist Theory: Application of constructivist principles in language learning

Constructivist theory, rooted in the works of Jean Piaget and Lev Vygotsky, posits that learners construct their own understanding and knowledge of the world through experiences and reflecting on those experiences. In the context of language learning, constructivist principles emphasize the importance of active involvement, meaningful context, and social interaction in the learning process (Vygotsky, 1978). This approach contrasts sharply with traditional methods that often rely on passive reception of information and rote memorization.

One of the core tenets of constructivist theory is that learners build new knowledge upon the foundation of previous learning. This concept, known as scaffolding, involves providing support structures to assist learners in achieving higher levels of understanding and skill (Wood, Bruner, & Ross, 1976). In language learning, scaffolding can take the form of guided practice, feedback, and interactive tasks that challenge students to apply grammatical rules in context.

Nearpod, as an interactive educational tool, aligns well with constructivist principles by facilitating an active learning environment where students engage with content through multimedia resources, collaborative activities, and immediate feedback. For instance, Nearpod's interactive quizzes and polls encourage students to actively process and apply grammatical rules, while its collaborative features enable peer-to-peer interaction and discussion, promoting a deeper understanding through social learning (Jonassen, 1999).

Moreover, constructivist theory advocates for learning in authentic contexts where students can relate new information to real-life situations. Nearpod's ability to incorporate real-world scenarios and multimedia elements helps create a rich, immersive learning experience that contextualizes grammar instruction, making it more relevant and meaningful for students (Herrington & Oliver, 2000). This contextualization aids in the internalization of grammatical structures and their practical use in communication.

1.2.2. Interactionist Theory: Importance of interaction in language acquisition

Interactionist theory, advanced by scholars such as Lev Vygotsky and Michael Long, emphasizes the role of social interaction in language acquisition. This theoretical perspective posits that language learning is fundamentally a social process, where interaction with more proficient speakers facilitates the development of linguistic skills. Vygotsky's concept of the Zone of Proximal Development (ZPD) is central to this theory, suggesting that learners can achieve higher levels of understanding and skill through collaborative learning experiences that are just beyond their current capabilities but attainable with guidance (Vygotsky, 1978).

Michael Long's Interaction Hypothesis further underscores the importance of interaction in language learning. According to Long (1983), meaningful communication and interaction provide opportunities for learners to receive comprehensible input, negotiate meaning, and receive corrective feedback. These interactive elements are important for the internalization of language rules and structures. Through conversational exchanges, learners can experiment with language, clarify misunderstandings, and refine their linguistic output, leading to more effective language acquisition.

In the context of EFL instruction, promoting interaction among students and between students and teachers can significantly enhance the learning process. Nearpod, with its interactive features, aligns well with the principles of

interactionist theory. For example, Nearpod's collaborative activities, such as group discussions, polls, and shared digital whiteboards, create opportunities for students to engage in meaningful communication and practice language in a social context. These interactive sessions allow learners to apply grammatical rules in real-time conversations, facilitating better retention and understanding.

Furthermore, Nearpod's immediate feedback mechanism is instrumental in the learning process. Interactionist theory highlights the importance of feedback in helping learners recognize and correct their linguistic errors. Nearpod's interactive quizzes and instant feedback provide students with timely information about their performance, enabling them to identify areas for improvement and adjust their language use accordingly. This immediate feedback loop is essential for reinforcing correct grammar usage and accelerating language development (Gass & Mackey, 2007).

1.2.3. Cognitive Theory: Role of cognitive processes in learning grammar

Cognitive theory focuses on the mental processes involved in learning, emphasizing how learners perceive, process, store, and retrieve information. This theory is rooted in the work of psychologists such as Jean Piaget and Jerome Bruner, who explored how cognitive development influences learning. In the context of language learning, cognitive theory highlights the importance of cognitive processes such as attention, memory, and problem-solving in acquiring and mastering linguistic structures (Piaget, 1952; Bruner, 1966).

One of the key concepts in cognitive theory is the idea of schema, which refers to the mental structures that organize and interpret information. When learning grammar, students develop and refine their grammatical schemas, which help them understand and produce correct language forms. Cognitive theory suggests that effective grammar instruction should facilitate the development of these schemas through activities that promote active engagement and meaningful practice (Anderson, 2005).

Nearpod, as an educational tool, supports the application of cognitive principles in grammar instruction by providing interactive and multimodal learning experiences. For instance, Nearpod's multimedia content, such as videos and interactive simulations, captures students' attention and enhances their ability to process and retain grammatical information. This multisensory approach aligns with cognitive theories of learning, which emphasize the importance of engaging multiple cognitive pathways to reinforce learning (Mayer, 2009).

Additionally, Nearpod's interactive exercises and quizzes help to strengthen memory retention by providing repeated and varied practice of grammatical structures. Cognitive theory posits that repetition and active recall are important for transferring information from short-term to long-term memory. By engaging students in various interactive activities that require them to apply grammatical rules in different contexts, Nearpod helps to reinforce their understanding and retention of grammar (Baddeley, 1997).

Problem-solving is another critical cognitive process in language learning. Nearpod's interactive features, such as collaborative problem-solving tasks and real-time feedback, encourage students to think critically and solve linguistic problems. These activities challenge students to analyze grammatical structures, identify patterns, and apply rules to new situations, thereby enhancing their cognitive skills and deepening their grammatical knowledge (Sweller, 1988).

1.3. Technology in EFL Teaching

Technology offers diverse opportunities to create interactive, engaging, and personalized learning experiences that cater to the varied needs of EFL students, this section explores the evolution of technology in language teaching, tracing its historical development and highlighting current trends and innovations that are shaping contemporary EFL instruction.

1.3.1. Evolution of Technology in Language Teaching: Historical perspective

The evolution of technology in language teaching can be traced back to the mid-20th century when language laboratories were first introduced. These labs, equipped with audio equipment, allowed students to listen to native speakers and practice their pronunciation and listening skills. This was a significant advancement at the time, as it provided a controlled environment for repetitive practice, which was considered important for language acquisition (Garrett, 1991).

In the 1980s and 1990s, the advent of personal computers brought about the era of Computer-Assisted Language Learning (CALL). Early CALL programs were often drill-based, focusing on grammar and vocabulary exercises. These programs

offered immediate feedback, which helped learners correct errors and reinforce learning (Chapelle, 2001). However, the scope of these early applications was limited, primarily focusing on rote learning rather than communicative competence.

The development of the internet in the late 20th century marked a significant turning point in language teaching. The internet provided access to a vast array of authentic language resources, including texts, audio, and video, which facilitated the development of more communicative and immersive learning experiences. Online forums and chat rooms also emerged, allowing learners to engage in real-time communication with native speakers and other learners worldwide (Warschauer, 1996).

1.3.1.1. Current Trends and Innovation

In the 21st century, the integration of technology in language teaching has continued to advance, driven by rapid developments in digital technologies and the increasing availability of mobile devices. Current trends in EFL instruction emphasize the use of multimedia resources, mobile learning (m-learning), and personalized learning environments to enhance the language learning experience.

Multimedia resources, such as videos, podcasts, and interactive simulations, are now widely used in EFL classrooms to provide rich, contextually relevant content that enhances comprehension and retention. These resources cater to different learning styles and make language learning more engaging and effective (Mayer, 2009). Additionally, language learning apps and platforms, such as

Duolingo and Rosetta Stone, offer gamified learning experiences that motivate students and provide personalized feedback (Godwin-Jones, 2011).

Mobile learning, enabled by the widespread use of smartphones and tablets, has made language learning more accessible and flexible. Students can now practice language skills anytime and anywhere, using apps and online resources that provide instant feedback and track their progress. This flexibility is particularly beneficial for EFL learners, who often need additional practice outside the classroom to reinforce their learning (Kukulska-Hulme & Shield, 2008).

Another significant trend is the use of learning management systems (LMS) and virtual classrooms, which facilitate blended learning and distance education. Platforms such as Moodle and Blackboard allow teachers to create and deliver online courses, manage assignments, and interact with students in real time. These platforms support a variety of multimedia content and interactive activities, making them versatile tools for language teaching (Blake, 2013).

Innovations such as augmented reality (AR) and virtual reality (VR) are also beginning to find their way into language classrooms. These technologies offer immersive learning experiences that can simulate real-life environments and interactions, providing students with contextualized and experiential learning opportunities (Godwin-Jones, 2016).

1.3.2. Benefits of Using Technology in EFL Classrooms

One of the most significant benefits of using technology in EFL classrooms is the increase in student engagement and motivation. Traditional language learning

methods can often be monotonous and fail to capture the interest of learners. In contrast, technology offers a variety of interactive and multimedia tools that can make learning more engaging and enjoyable. For instance, digital platforms like Nearpod integrate videos, quizzes, games, and interactive simulations, which can capture students' attention and make learning more dynamic (Mayer, 2009).

These multimedia resources cater to different learning styles, helping to maintain students' interest and motivation. Research has shown that interactive and gamified learning environments can significantly enhance student engagement, leading to better retention and understanding of the material (Prensky, 2001). Moreover, technology enables real-time feedback and instant rewards, which can further motivate students by providing immediate recognition of their efforts and progress (Garris, Ahlers, & Driskell, 2002). This continuous engagement and reinforcement help to sustain learners' motivation, making them more likely to invest time and effort in their language studies.

Another key advantage of technology in EFL classrooms is the ability to provide personalized and adaptive learning experiences. Traditional classroom settings often struggle to cater to the individual needs of students, particularly in large classes where it is challenging for teachers to address each learner's unique pace and learning style. Technology, however, offers solutions through adaptive learning systems that tailor educational content to the individual needs of students.

These systems use algorithms to assess students' performance and provide customized learning paths that target their specific weaknesses and build on their

strengths (Shute & Zapata-Rivera, 2012). For example, language learning apps like Duolingo and Rosetta Stone adjust the difficulty of exercises based on the learner's progress, ensuring that students are neither bored with content that is too easy nor overwhelmed by content that is too difficult (Loewen et al., 2019). Furthermore, technology enables self-paced learning, allowing students to learn at their own speed and revisit challenging concepts as needed.

This personalized approach not only enhances learning outcomes but also promotes a sense of autonomy and self-efficacy among students, which are important for effective language acquisition (Bandura, 1997). By meeting the diverse needs of learners, technology helps create a more inclusive and effective learning environment.

1.3.3. Challenges and Limitations: Technological barriers

While the integration of technology in EFL classrooms offers numerous benefits, it also presents significant challenges and limitations. One of the primary barriers is technological infrastructure. In many educational settings, especially in developing countries, access to reliable internet and adequate technological resources remains a significant issue. Schools may lack the necessary hardware, such as computers, tablets, and interactive whiteboards, to fully implement technology-enhanced learning (Tondeur et al., 2017).

Additionally, frequent technical issues such as software malfunctions, connectivity problems, and inadequate technical support can disrupt the learning process and diminish the potential benefits of using technology in education (Hsu,

2016). These barriers can lead to frustration among both teachers and students, reducing their willingness to engage with digital tools. The digital divide, which reflects the disparity in access to technology between different socio-economic groups, further exacerbates these challenges, making it difficult for all students to benefit equally from technological advancements (van Dijk, 2005).

Another critical challenge is the readiness and proficiency of both teachers and students in using technology effectively. Successful integration of technology in EFL instruction requires teachers to possess not only basic digital literacy but also pedagogical skills to integrate technology meaningfully into their teaching practices (Ertmer & Ottenbreit-Leftwich, 2010).

However, many teachers may feel unprepared or lack confidence in using new technologies, often due to insufficient training and professional development opportunities. This lack of preparedness can result in underutilization or ineffective use of technological tools, thereby limiting their potential impact on learning outcomes (Kim et al., 2013).

Similarly, students' readiness to engage with technology varies significantly. While younger generations are generally more comfortable with digital tools, there is still a need for training and support to ensure that all students can use these tools effectively for learning purposes. Furthermore, students with limited prior experience with technology may find it challenging to adapt to technology-enhanced learning environments, which can hinder their academic progress (Drayton et al., 2010).

Moreover, both teachers and students must navigate the challenge of balancing the use of technology with traditional teaching methods to ensure a comprehensive and well-rounded educational experience. Without careful planning and support, the integration of technology can sometimes lead to an over-reliance on digital tools, potentially neglecting essential face-to-face interactions and hands-on activities that are important for language learning (Hubbard, 2009).

1.4. Nearpod as an Educational Tool

Nearpod is a robust educational platform designed to transform traditional teaching methods by integrating multimedia and interactive content into lessons, thereby enhancing student engagement and learning outcomes.

1.4.1. Overview of Nearpod

Launched in 2012, Nearpod offers educators a versatile toolkit to create, deliver, and manage interactive lessons that cater to diverse learning styles. Central to Nearpod's functionality are its interactive slideshows, which allow instructors to incorporate multimedia elements such as videos, quizzes, polls, and simulations directly into their presentations. This multimedia-rich approach not only captures students' attention but also provides them with active learning opportunities to interact with content in meaningful ways (Kolb, 2014).

Moreover, Nearpod facilitates real-time feedback, enabling teachers to instantly assess student responses to quizzes and polls. This feature supports formative assessment practices, allowing educators to monitor student progress and adapt instruction to address individual learning needs promptly (Denton & Sewall,

2017). Additionally, Nearpod promotes collaborative learning through activities like Collaborate Boards, where students can share ideas, work together on projects, and engage in discussions. This collaborative approach promotes peer interaction and communication skills, which are vital in language learning contexts (Berge & Collins, 1995).

Compared to other educational tools, Nearpod stands out for its user-friendly interface and comprehensive suite of interactive features tailored for educational settings. While platforms like Kahoot! emphasize game-based learning and Quizlet focus on flashcard-based study tools, Nearpod integrates various multimedia components seamlessly into lessons, offering a more holistic approach to enhancing learning experiences (Sundararajan & Adhikari, 2018). This versatility makes Nearpod a valuable asset in EFL classrooms, where the combination of visual, auditory, and interactive elements can deepen students' understanding and retention of language concepts.

1.4.1.1. Description and features of Nearpod

Nearpod is an innovative educational platform that enhances classroom engagement and learning outcomes through interactive and multimedia-rich lessons. Developed in 2012, Nearpod enables educators to create dynamic presentations by integrating various multimedia elements directly into their lessons. These elements include interactive slides, videos, quizzes, polls, virtual reality experiences, and collaborative activities like the Collaborate Board. Teachers can

customize their presentations to suit diverse learning styles and preferences, making lessons more engaging and effective (Denton & Sewall, 2017; Kolb, 2014).

One of Nearpod's standout features is its real-time interaction capabilities. Teachers can conduct live sessions where students participate in quizzes and polls, providing immediate feedback to assess comprehension and adjust instruction as needed. This formative assessment tool promotes active learning by encouraging student engagement and interaction with the content (Sundararajan & Adhikari, 2018). Additionally, Nearpod supports differentiation through personalized learning experiences. Educators can deliver content at varying paces and levels of difficulty, ensuring that each student receives instruction tailored to their individual needs and learning progress (Denton & Sewall, 2017).

Nearpod's interface is designed to be intuitive and user-friendly, facilitating seamless integration into classroom environments. Teachers can access a library of ready-made lessons and collaborate with colleagues to share resources and ideas. This collaborative aspect enhances professional development and instructional quality by enabling educators to learn from each other's experiences and best practices (Kolb, 2014).

1.4.1.2. Comparison with other educational tools

Compared to other educational tools, Nearpod distinguishes itself through its comprehensive suite of interactive features and its emphasis on real-time engagement and formative assessment. Platforms like Kahoot! and Quizlet focus on gamified learning and flashcard-based study tools, respectively. While these

tools are valuable for specific learning objectives, Nearpod offers a more integrated approach by combining multimedia elements, interactive assessments, and collaborative activities within a single platform (Sundararajan & Adhikari, 2018).

Nearpod's ability to incorporate virtual reality (VR) experiences sets it apart from many other educational tools. VR can provide immersive learning environments that simulate real-world scenarios, offering students experiential learning opportunities that enhance understanding and retention of complex concepts (Denton & Sewall, 2017). This feature is particularly beneficial in subjects like science, history, and geography, where visual and spatial understanding play a important role in comprehension.

Moreover, Nearpod's emphasis on data-driven instruction supports educators in making informed decisions about instructional strategies and student interventions. The platform generates analytics and reports on student performance, allowing teachers to track progress, identify areas of difficulty, and tailor instruction accordingly (Kolb, 2014). This data-driven approach promotes continuous improvement in teaching practices and student outcomes, promoting a more effective and personalized learning environment.

1.4.2. Nearpod in Language Teaching

Nearpod offers significant advantages for language teaching by leveraging its interactive and multimedia capabilities to enhance engagement and facilitate language acquisition. In language classrooms, Nearpod allows educators to create dynamic and immersive learning experiences that cater to diverse learning styles

and promote active participation. Through interactive slides, teachers can incorporate videos, audio recordings, and virtual reality experiences that provide contextualized language input and simulate real-life language use scenarios (Denton & Sewall, 2017). These multimedia resources help to reinforce language concepts and improve comprehension by presenting language in authentic contexts.

Moreover, Nearpod supports formative assessment practices in language teaching. Teachers can embed quizzes, polls, and open-ended questions within their presentations to gauge students' understanding of grammar rules, vocabulary usage, and language structures in real time (Kolb, 2014). This immediate feedback enables teachers to identify areas of difficulty and adjust instruction to address learners' specific needs promptly. For example, teachers can use quiz results to initiate classroom discussions or provide additional practice activities tailored to individual student performance levels (Sundararajan & Adhikari, 2018).

Collaborative activities within Nearpod, such as the Collaborate Board feature, also enhance language learning by promoting peer interaction and communication skills. Students can collaborate on group projects, share ideas, and engage in discussions in real time, thereby practicing their speaking and listening skills in an interactive and supportive environment (Denton & Sewall, 2017). This collaborative approach not only reinforces language learning but also promotes a sense of community and teamwork among students.

Additionally, Nearpod's ability to track student progress and generate analytics provides valuable insights into individual and group performance in

language learning. Teachers can monitor students' participation, quiz scores, and comprehension levels over time, allowing for data-driven decision-making in instructional planning and curriculum development (Kolb, 2014). This data-driven approach supports differentiated instruction by identifying areas where students may need additional support or enrichment activities to further their language proficiency.

1.4.2.1. Applications in EFL classrooms

Nearpod offers versatile applications in English as a Foreign Language (EFL) classrooms, enriching language instruction through its interactive features and multimedia resources. In EFL settings, Nearpod facilitates the integration of authentic language input and immersive learning experiences that engage students and enhance language acquisition. Educators can create interactive lessons that include videos, audio recordings, and virtual reality simulations to provide contextualized language practice and exposure to real-life language use scenarios (Denton & Sewall, 2017).

Nearpod supports differentiated instruction by allowing teachers to personalize learning experiences based on students' language proficiency levels and learning preferences. Teachers can adjust the pace and complexity of lessons, provide immediate feedback through embedded quizzes and polls, and offer additional support or extension activities as needed (Sundararajan & Adhikari, 2018).

Furthermore, Nearpod enhances formative assessment practices in EFL classrooms. Teachers can assess students' understanding of grammar rules, vocabulary usage, and language structures in real time through interactive quizzes and open-ended questions embedded within lessons (Kolb, 2014).

1.4.2.2. Case studies and empirical evidence

Empirical evidence and case studies demonstrate the effectiveness of Nearpod in enhancing language learning outcomes and student engagement in EFL contexts. For example, research has shown that integrating interactive multimedia elements into language instruction, as facilitated by Nearpod, improves students' motivation and comprehension of language concepts (Denton & Sewall, 2017). Studies also highlight Nearpod's role in promoting active learning and collaborative skills among EFL learners through features like the Collaborate Board, where students can engage in group discussions and collaborative projects (Kolb, 2014).

In a case study conducted in EFL classrooms, Nearpod was found to significantly increase student participation and interaction with course content compared to traditional teaching methods (Sundararajan & Adhikari, 2018). The use of real-time feedback and interactive assessments within Nearpod sessions not only enhanced students' understanding of language concepts but also provided teachers with valuable insights into individual learning needs and performance trends.

Moreover, Nearpod's ability to track student progress and generate analytics enables educators to monitor student achievement and adjust instructional strategies

based on data-driven insights (Kolb, 2014). This data-driven approach supports continuous improvement in teaching practices and curriculum development, ultimately leading to enhanced learning outcomes in EFL classrooms.

1.5. Effectiveness of Nearpod in Teaching Grammar

Nearpod has proven to be highly effective in teaching grammar by leveraging its interactive features and multimedia capabilities to engage students and enhance learning outcomes. In the context of grammar instruction, Nearpod allows educators to create dynamic lessons that incorporate interactive slides, quizzes, videos, and simulations tailored to reinforce grammar rules and concepts (Denton & Sewall, 2017). These multimedia resources provide visual and auditory stimuli that help students visualize grammar rules in context, making abstract concepts more concrete and easier to understand.

One of Nearpod's strengths in teaching grammar lies in its ability to provide immediate feedback through embedded quizzes and polls. Teachers can assess students' understanding of grammar rules in real time, identify misconceptions or areas of difficulty, and adjust instruction accordingly (Sundararajan & Adhikari, 2018). This formative assessment approach not only supports ongoing learning but also promotes active engagement and participation among students.

Moreover, Nearpod facilitates differentiated instruction by allowing teachers to personalize learning experiences based on students' proficiency levels and learning needs. Educators can modify the pace and complexity of lessons, provide additional explanations or examples as needed, and offer targeted practice

activities to reinforce grammar skills (Kolb, 2014). This personalized approach helps to cater to diverse learning styles and ensures that all students have the opportunity to master grammar concepts at their own pace.

Empirical studies have demonstrated the effectiveness of Nearpod in improving grammar proficiency and retention among students. Research indicates that integrating interactive and multimedia elements into grammar instruction enhances student motivation, comprehension, and application of grammar rules (Denton & Sewall, 2017). By providing a stimulating and interactive learning environment, Nearpod not only increases student engagement but also promotes a deeper understanding of grammar concepts through active participation and hands-on learning experiences.

1.5.1. Engagement and Interactivity

Nearpod excels in enhancing student engagement and interactivity through its interactive features, particularly in the context of grammar instruction. By integrating multimedia elements and interactive exercises, Nearpod transforms grammar lessons into dynamic and participatory experiences that capture students' attention and promote active learning. Interactive grammar exercises embedded within Nearpod lessons allow students to actively engage with grammar rules and concepts through hands-on practice and immediate feedback (Denton & Sewall, 2017).

One of Nearpod's strengths lies in its ability to enhance student participation by providing various interactive tools such as quizzes, polls, and open-ended

questions. These tools encourage students to actively interact with the content, answer questions, and provide responses in real time, promoting a more engaging and collaborative learning environment (Sundararajan & Adhikari, 2018). For example, teachers can create grammar quizzes that prompt students to identify parts of speech, correct sentence structures, or apply grammar rules in context. Immediate feedback on quiz responses helps students understand their strengths and areas needing improvement, facilitating active participation and deeper learning (Kolb, 2014).

Moreover, Nearpod's interactive features enable educators to tailor grammar exercises to meet diverse learning needs and preferences. Teachers can customize lessons by adjusting the difficulty level of exercises, providing additional explanations or examples, and offering differentiated practice activities based on students' proficiency levels (Denton & Sewall, 2017). This personalized approach not only enhances student engagement but also supports individualized learning experiences that cater to students' unique learning styles and needs.

1.5.2. Collaborative Learning

Nearpod supports collaborative learning in grammar instruction by facilitating group work and peer learning activities that encourage students to interact, collaborate, and learn from each other's perspectives. Collaborative learning is essential in grammar instruction as it not only enhances students' understanding of grammar rules but also improves their communication and teamwork skills.

Nearpod's Collaborate Board feature enables students to engage in collaborative activities where they can work together on grammar-related tasks, share ideas, and discuss concepts in real time (Denton & Sewall, 2017). For example, teachers can create collaborative grammar exercises where students collaborate to identify and correct grammar mistakes in sentences, create dialogues using target grammar structures, or generate examples of grammar rules in different contexts.

Moreover, Nearpod's interactive tools such as polls and discussions further facilitate peer learning by encouraging students to share their opinions, ask questions, and provide feedback to their peers (Sundararajan & Adhikari, 2018). Teachers can initiate class discussions on grammar topics, where students can express their understanding of grammar rules, discuss language usage, and clarify concepts through collaborative dialogue.

Examples of collaborative grammar activities using Nearpod include group projects where students create multimedia presentations on specific grammar rules, peer editing exercises where students review and provide feedback on each other's writing assignments, and collaborative problem-solving tasks where students work together to analyze grammar errors and propose corrections (Denton & Sewall, 2017).

1.5.3. Immediate Feedback and Assessment

Nearpod's capability to provide immediate feedback and assessment offers significant benefits in grammar instruction, enhancing learning outcomes and

student engagement. Immediate feedback is important in grammar teaching as it allows educators to identify misconceptions, correct errors promptly, and reinforce the correct usage of grammar rules in real-time (Denton & Sewall, 2017). This timely feedback not only supports continuous learning but also motivates students by providing them with clear guidance on their progress and areas needing improvement.

One of the key benefits of immediate feedback in grammar instruction is its ability to enhance student understanding and retention of grammar concepts. Through interactive quizzes, polls, and open-ended questions embedded within Nearpod lessons, teachers can assess students' comprehension of grammar rules and structures instantly (Sundararajan & Adhikari, 2018). This formative assessment approach helps educators adapt their teaching strategies to meet individual learning needs, ensuring that students receive personalized support and guidance in mastering grammar skills (Kolb, 2014).

Formative assessment techniques supported by Nearpod include diagnostic quizzes at the beginning of lessons to gauge prior knowledge, interactive exercises throughout the lesson to monitor comprehension, and immediate feedback on student responses to reinforce correct answers or provide additional explanations (Denton & Sewall, 2017). For example, teachers can use multiple-choice quizzes to assess students' understanding of verb tenses or sentence structure, with instant feedback provided on each response to guide further learning and comprehension.

Moreover, Nearpod's data-driven approach to assessment enables educators to track student progress, analyze performance trends, and make informed instructional decisions based on real-time data (Kolb, 2014). By generating analytics on student participation, quiz scores, and comprehension levels, Nearpod empowers teachers to identify areas of strength and improvement in grammar instruction, promoting continuous improvement in teaching practices and student outcomes.

Chapter 2: Research Methodology

This chapter incorporated the pertinent methods used to develop the proposed research, explaining main components such as design, operationalization of variables, instruments, studied sample and initial diagnose.

2.1. Statement and justification of the research approach

The research approach for this study employs an explanatory sequential design within a quantitative framework to study the use of Nearpod as a gamification tool in teaching English grammar to A2-level EFL university students at the University of Babahoyo. This methodological choice is driven by the need to explore both the measurable impact of Nearpod on students' grammar proficiency and their insights into the experiences and perceptions of using the tool in their language learning process.

In the initial quantitative phase, the study assessed objective measures of grammar improvement facilitated by Nearpod. This involved pre- and post-intervention tests focusing on various aspects of English grammar, including verb tenses, subject-verb agreement, prepositions, and articles. By analyzing the scores before and after the intervention period, the study quantified the observable impact of Nearpod on enhancing the students' grammatical accuracy. The quantitative data collected provided evidence of the effectiveness of gamification in improving grammar skills, offering statistical support for the integration of such tools in EFL classrooms.

Subsequently, semi-structured surveys were administered reflective questionnaires to gather insights into the students' perceptions of Nearpod's usability, engagement level, and impact on their learning motivation. These data uncovered the reasons behind the observed quantitative outcomes, providing an understanding of how gamification influences grammar learning from the students' perspective. This approach aligned with the constructivist and socio-cultural theories of language learning, which emphasized the importance of interactive and engaging learning environments.

2.2. Description of the research methods and their purposes in the context of the proposal

The research methodology for this study employs quantitative approach to explore the effectiveness of Nearpod as a gamification tool in teaching English grammar to A2-level EFL university students at the University of Babahoyo. This approach integrates quantitative methods, providing a comprehensive analysis of Nearpod's impact on students' grammar proficiency and their learning experiences.

In the initial quantitative phase, the study focuses on objective measurements of grammar improvement facilitated by Nearpod. This phase involves administering pre- and post-intervention grammar tests that assess specific grammatical areas such as verb tenses, subject-verb agreement, prepositions, and articles. These tests will be conducted before and after the intervention period, during which students will regularly use Nearpod for grammar exercises. The primary purpose of this phase is to quantify the observable impact of Nearpod on

students' grammatical accuracy and overall language proficiency. By comparing the pre- and post-test scores, the study aims to determine the extent of improvement in students' grammar skills attributable to the use of Nearpod. This quantitative data will provide statistical evidence to support the hypothesis that gamification enhances grammar learning in EFL contexts.

Following the quantitative phase, the next part involves conducting semi-structured surveys and administering reflective questionnaires to gather in-depth insights into students' experiences and perceptions of using Nearpod. The semi-structured surveys were conducted with a selected sample of students, providing them with an opportunity to discuss their thoughts on Nearpod's usability, engagement level, and impact on their motivation and learning. The reflective questionnaires were administered to a broader group of students, capturing their self-assessed improvement in grammar skills and their overall experience with the gamified learning tool.

The quantitative phase provides measurable and generalizable data on grammar improvement, offering concrete evidence of the tool's effectiveness. Meanwhile, the qualitative phase enriches this data with personal narratives and contextual insights, revealing the underlying mechanisms of student engagement and learning. This comprehensive approach allows the research to address both the "what" and the "why" of Nearpod's impact, providing an understanding of its role in enhancing EFL grammar instruction. Ultimately, this research methodology aims to contribute valuable knowledge to the field of EFL education, supporting the

effective integration of gamification in language learning to enhance student outcomes.

2.3. Conceptualization and operationalization of the main categories

The conceptualization and operationalization of the main categories in this study involve defining and clarifying key constructs related to the use of Nearpod as a gamification tool and the improvement of grammar skills among A2-level EFL university students. These constructs are carefully delineated to facilitate precise measurement and analysis, thereby ensuring the reliability and validity of the research findings.

The independent variable in this study is the "Use of Nearpod," which is conceptually defined as the process through which students engage in grammar learning via interactive and gamified activities provided by the Nearpod platform. This variable encompasses two main dimensions: Nearpod Engagement and Gamification Elements. Nearpod Engagement refers to the extent and manner in which students utilize Nearpod, operationalized through indicators such as the frequency of usage, duration of each session, and the types of activities completed (e.g., quizzes, polls, interactive lessons). These indicators are measured using nominal and interval scales to capture both categorical and continuous aspects of engagement. Gamification Elements, on the other hand, focus on the motivational and engagement aspects of using Nearpod, with indicators like student motivation and engagement levels measured on a 5-point Likert scale.

The dependent variable, "Grammar Skills Improvement," pertains to the enhancement of students' ability to use English grammar accurately and effectively. This variable is conceptually framed to include two key dimensions: Grammar Accuracy and Grammar Application. Grammar Accuracy involves pre- and post-test scores on grammar tests and error rates in grammar usage, measured using interval scales to provide precise numerical data on students' performance. Grammar Application encompasses the correct use of specific grammatical constructs such as verb tenses, subject-verb agreement, prepositions, and articles. These aspects are operationalized using a 5-point Likert scale to gauge the frequency and correctness of grammar usage in various contexts.

A mediating variable, "Student Perceptions and Experiences," is included to capture the subjective views and experiences of students using Nearpod for grammar learning. This variable is divided into three dimensions: Usability, Engagement, and Perceived Effectiveness. Usability refers to how easily students can use the Nearpod platform, with indicators like ease of use and satisfaction with the interface measured on a 5-point Likert scale. Engagement measures the level of interest and enjoyment students experience during Nearpod activities, also using a 5-point Likert scale. Perceived Effectiveness assesses students' self-reported improvement in grammar skills and their confidence in using English grammar, again measured on a 5-point Likert scale.

Operationalizing these categories involves translating the conceptual definitions into measurable and observable indicators for empirical investigation. For the independent variable, the use of nominal and interval scales allows for

capturing both the frequency and intensity of Nearpod usage. The dependent variable's operationalization through interval scales for accuracy and Likert scales for application ensures a comprehensive assessment of grammar skills improvement. The mediating variable's dimensions are similarly quantified through Likert scales, facilitating the collection of data on students' perceptions and experiences.

Table 1

Operationalization of Variables Matrix

Variable	Operational Definition	Dimensions	Indicators	Measurement Scale
Independent Variable (IV): Use of Nearpod	The process of engaging students in grammar learning through interactive and gamified activities provided by the Nearpod platform.	1. Nearpod Engagement	1.1 Frequency of Nearpod usage	Nominal
			1.2 Duration of each Nearpod session	Interval
			1.3 Types of activities completed (quizzes, polls, interactive lessons)	Nominal
		2. Gamification Elements	2.1 Student motivation levels	5-point Likert Scale
			2.2 Student engagement levels	5-point Likert Scale
Dependent Variable (DV): Grammar Skills Improvement	The enhancement of students' ability to use English grammar accurately and effectively.	1. Grammar Accuracy	1.1 Pre- and post-test scores on grammar tests	Interval
			1.2 Error rates in grammar usage	Interval
		2. Grammar Application	2.1 Correct use of verb tenses	5-point Likert Scale

Mediating Variable: Student Perceptions and Experiences	The subjective views and experiences of students using Nearpod for grammar learning.		2.2 Proper subject-verb agreement	5-point Likert Scale
			2.3 Accurate use of prepositions	5-point Likert Scale
			2.4 Correct article usage	5-point Likert Scale
		1. Usability	1.1 Ease of use of the Nearpod platform	5-point Likert Scale
			1.2 Satisfaction with the interface	5-point Likert Scale
		2. Engagement	2.1 Level of interest in Nearpod activities	5-point Likert Scale
			2.2 Perceived enjoyment of gamified learning	5-point Likert Scale
		3. Perceived Effectiveness	3.1 Self-assessed improvement in grammar skills	5-point Likert Scale
			3.2 Confidence in using English grammar	5-point Likert Scale

Note. The Operationalization of Variables Matrix outlines the key variables and dimensions involved in assessing the effectiveness of Nearpod as a gamification tool for teaching English grammar to A2-level EFL students. Each variable is operationalized through specific indicators and measured using appropriate scales, ensuring systematic data collection and analysis.

2.4. Description of the instruments based on the research approach.

As mechanisms to explore the effectiveness of Nearpod as a gamification tool in teaching English grammar to A2-level EFL university students, different instruments were employed, considering both quantitative and qualitative data. These instruments were designed to align with the mixed-methods research approach, facilitating a thorough examination of the study's variables. For the quantitative phase, the primary instruments were grammar tests administered before and after the intervention period.

These tests assessed students' proficiency in various grammatical areas, including verb tenses, subject-verb agreement, prepositions, and articles. The pre-test established a baseline measure of students' grammar skills, while the post-test identified any improvements following the use of Nearpod. Additionally, Nearpod itself served as an instrument for collecting quantitative data on student engagement. The platform's built-in analytics tracked metrics such as the frequency of usage, duration of sessions, grades, and types of activities completed by each student. This data offered insights into how students interact with the gamified content and the extent of their engagement with the tool.

Then, semi-structured interviews and reflective questionnaires were employed to gather in-depth insights into students' and teachers' experiences with Nearpod. The surveys were conducted with a selected group of teachers, allowing for a flexible yet focused exploration of their perceptions regarding Nearpod's usability, engagement level, and impact on their learning motivation. Together,

these instruments are designed to complement each other, ensuring that the study explored a holistic view of Nearpod's effectiveness.

2.5. Description of the validation of Instruments

The validation process for the instruments employed in this research primarily involved expert judgment and pilot testing, which are established methods to assess the relevance, clarity, and robustness of the tools. For the grammar tests used in the quantitative phase, validation began with a thorough review by an experienced EFL educator and language assessment specialist.

The expert evaluated the test items for content validity, ensuring that each item accurately measures the specific grammatical constructs it is intended to assess, such as verb tenses, subject-verb agreement, prepositions, and articles. This expert provided feedback on the alignment of the test items with the A2-level curriculum and the comprehensiveness of the coverage of essential grammar skills. Based on their input, necessary revisions were made to improve the clarity, relevance, and difficulty level of the test items, thereby enhancing the overall validity of the grammar tests.

For the semi-structured questionnaire used, validation involved an iterative process of expert review and pilot testing. Initially, a draft of the survey questions and questionnaire items was developed based on the study's objectives and existing literature on gamification and language learning. This draft was then reviewed by an expert in research and EFL education. The expert provided feedback on the clarity, relevance, and potential for bias in the questions, as well as their alignment

with the research goals. Revisions were made to refine the questions, ensuring they effectively capture students' perceptions, experiences, and self-assessed improvement in grammar skills.

Following the expert review, a pilot test was conducted with a small group of A2-level EFL students who were not part of the main study sample. The pilot test aimed to identify any ambiguities or difficulties in understanding the questions and questionnaire items. Participants' feedback was collected and analyzed, leading to further refinement of the instruments. This process helped ensure that the questions were clear, comprehensible, and capable of eliciting meaningful and relevant responses from the students.

2.6. Population, Sample, And Sampling

The population for this study comprises A2-level EFL university students enrolled in the English program at the University of Babahoyo. These students have been selected due to their level of English proficiency, which makes them ideal candidates for assessing the impact of Nearpod as a gamification tool for enhancing grammar skills. The total number of A2-level students at the university during the study period is 286.

To ensure the study's findings are representative and generalizable, a simple random sampling method was employed. This approach provides each student in the population with an equal chance of being selected, thereby minimizing selection bias and enhancing the validity of the results. Then, a sample size of 40 students was determined using Cochran's formula for sample size calculation, which

considers the desired confidence level and margin of error, given a 95% confidence level and a 5% margin of error.

This sample size ensured adequate power to detect significant effects and provides a robust basis for statistical analysis. The selection process involves assigning a unique identifier to each student in the A2-level cohort, using a random number generator, 40 students will be randomly selected from the population. This method ensures that every student has an equal opportunity to participate in the study, thereby enhancing the representativeness of the sample.

The inclusion criteria for the study require students to be actively enrolled in A2-level English courses at the University of Babahoyo during the study period and to have consented to participate in the research. These criteria ensure that participants are currently engaged with the curriculum and are at the appropriate proficiency level to benefit from the Nearpod intervention.

Throughout the study, efforts will be made to maintain a balanced representation of students in terms of gender, age, and academic performance to control for potential confounding variables. The demographic characteristics of the sample were recorded and analyzed to ensure that the groups are comparable and that any observed differences in outcomes can be attributed to the intervention rather than extraneous factors.

2.7. Data Analysis and Ethical Considerations

For the quantitative analysis, pre-test and post-test scores were the primary focus. These tests measured students' grammar proficiency before and after the intervention. Descriptive statistics, such as means, medians, and standard

deviations, were calculated to summarize the pre-test and post-test scores for both the experimental group (using Nearpod) and the control group (traditional instruction). Inferential statistical methods, including paired t-tests and Analysis of Variance (ANOVA), were employed to compare the pre-test and post-test scores within each group and between the two groups. This comparison helped determine the significance of any observed improvements in grammar proficiency and attribute them to the Nearpod intervention.

In addition to the test scores, metrics such as frequency of usage, session duration, and types of activities completed was analyzed. Descriptive statistics summarized these engagement metrics, and correlation analysis was conducted to explore the relationship between student engagement with Nearpod and improvements in grammar proficiency. This analysis helped determine whether higher levels of engagement with the gamified learning tool correlate with greater improvements in grammar skills.

For the analysis, data were gathered from a semi-structured questionnaire, its analysis provided contextual insights into students' perceptions of Nearpod's usability, its impact on their motivation and interest in learning grammar, and any challenges they encountered. The data complemented the quantitative findings, offering a richer understanding of the ways in which Nearpod influences grammar learning.

On the other hand, ethical considerations are important in ensuring the integrity of the study and the protection of participants' rights. Informed consent was obtained from all participants before the commencement of the study. This

consent process involved providing detailed information about the study's purpose, procedures, potential risks, and benefits, as well as assuring participants of their right to withdraw from the study at any time without any negative consequences.

Confidentiality was strictly maintained throughout the study, personal data collected from participants were anonymized by assigning unique identifiers to each student, and all data were securely stored to prevent unauthorized access. Only the researcher had access to the anonymized data, and any reporting of the study's findings was done in a manner that ensured individual participants could not be identified.

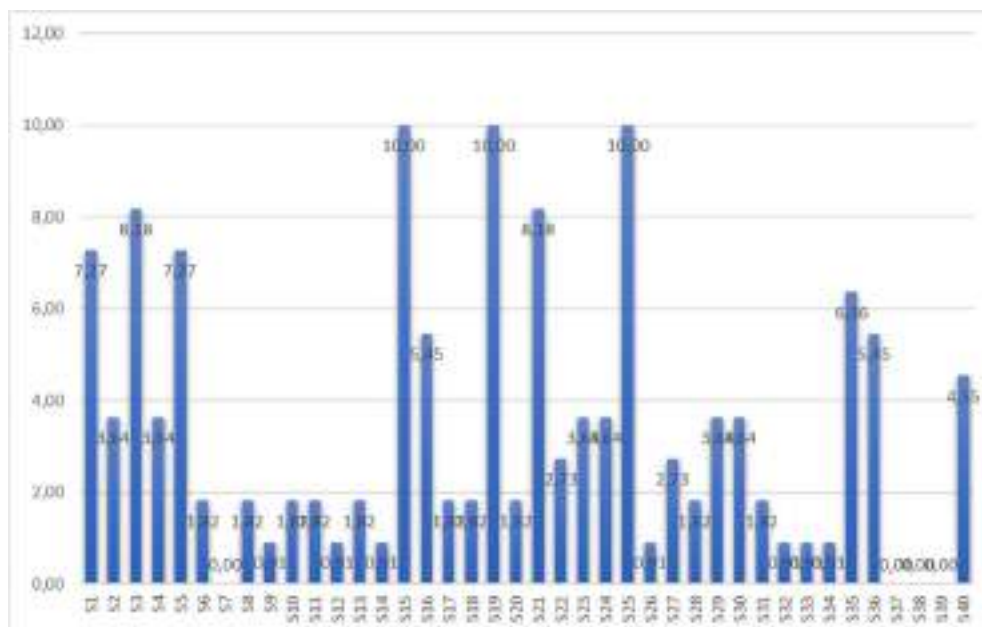
Additionally, the study ensured that the use of Nearpod and the participation in related activities did not cause any harm or undue stress to the students. The researcher was available to address any concerns or issues raised by the participants during the study. Ethical approval was sought from the relevant institutional review board (IRB) at the University of Babahoyo to ensure that the study adheres to established ethical guidelines and standards.

2.8. Initial Diagnosis

The pre-test results provided an initial diagnostic overview of the scores obtained by the students in Level 2 (CEFR A2), previous evaluation of the effectiveness of Nearpod as a tool in teaching English grammar in the University of Babahoyo. The scores were obtained in the platform, each student have received a score out of 10 and it is presented in Figure 1.

Figure 1

Students obtained scores in the Pre-test activity



Note. This Figure was elaborated by the Author.

Initially, the data presents a significant number of students fell within a range of 0 to 3.64, suggesting a low proficiency level within this range. The Pre-test results highlighted that students may need improvement in grammar capabilities. Then, these scores could serve as a baseline for comparison with Post-test results, helping to measure the effectiveness of Nearpod platform.

Table 2

Pre-test statistic based on Scores of the A2-Level students

		Intervention
N	Valid	40
	Lost	0
Mean		3.36

Standard error of mean	0.47
St. Deviation	2.97
Variance	8.73

Note. This table was elaborated by the Author.

Analyzing Tabl2 2, the standard error of the mean, which is approximately 0.47, suggests a moderate level of precision in estimating the population mean from this sample. A lower standard error would have indicated a more precise estimate, whereas this value suggests some variability in the sample means. Then, the standard deviation of about 2.96 reflects the degree of variation or dispersion in the scores.

This high standard deviation indicates that the scores are widely spread around the mean, meaning there is significant variability in how participants performed on the pre-test. This spread is further quantified by the variance, which is 8.73, showing how much the scores diverge from the mean. Then, while the average score is 3.36, the considerable standard deviation and variance highlight the diverse range of scores among participants.

Chapter 3: Research Proposal

In this chapter, the designed methodology was implemented, beginning with the proposal of using Nearpod as a way to improve grammar abilities on students at the University of Babahoyo. The proposal outlines the theoretical foundations, empirical validation, and feasibility of the study, highlighting the potential benefits for both educators and students, as much as, analyzes the results obtained from this process and the designed instruments, followed by a thorough discussion of these results.

3.1. Validation of the proposal

The validation of this research proposal is anchored in both empirical and theoretical grounds. Empirically, numerous studies have demonstrated the positive impact of interactive technologies on student engagement and learning outcomes. Nearpod, with its capacity to offer real-time feedback, interactive activities, and multimedia content, is particularly well-suited for addressing the challenges of teaching grammar in an EFL context. Theoretically, the use of Nearpod aligns with constructivist and cognitive learning theories, which emphasize active learning and the role of technology in supporting meaningful interaction and knowledge construction. By integrating these elements, the proposal is expected to yield significant insights into the efficacy of Nearpod as a grammar teaching tool.

In terms of viability and feasibility, this proposal benefits from the increasing availability and accessibility of digital tools in educational settings. Nearpod's user-friendly interface and compatibility with various devices make it a

practical option for both instructors and students. Additionally, the platform's ability to adapt to different teaching styles and curricula ensures that it can be seamlessly integrated into the existing educational framework at the Technical University of Babahoyo. The anticipated benefits of this study include improved student engagement, enhanced understanding of grammatical concepts, and the provision of a replicable model for other EFL contexts.

3.2.Theoretical foundations

The theoretical underpinnings of this study on the use of Nearpod in teaching English grammar to EFL students are rooted in several key educational frameworks that guide effective language instruction. These frameworks include Constructivist Theory, Interactionist Theory, and Cognitive Theory, each of which offers valuable insights into the role of technology in facilitating language learning. By aligning the functionalities of Nearpod with these established theories, this research aims to validate the pedagogical soundness of using such a tool in the EFL classroom.

Constructivist Theory, which posits that knowledge is actively constructed by learners rather than passively absorbed, is central to the use of Nearpod in grammar instruction. This theory suggests that learners make sense of new information by connecting it to their existing knowledge base, which is then modified and expanded through active engagement. Nearpod's interactive features, such as real-time polls, quizzes, and collaborative boards, provide students with opportunities to apply grammar rules in context, thus enabling them to construct

their understanding of these rules through active participation. The platform also allows for the integration of multimedia resources, which can further enhance students' ability to connect abstract grammatical concepts with real-world examples, thus reinforcing their learning.

Interactionist Theory also plays an important role in the theoretical foundation of this research. This theory emphasizes the importance of interaction between learners and their environment, particularly in the context of language acquisition. Interactionist theorists argue that language is best learned through social interaction, where learners can practice and refine their language skills in communicative contexts. Nearpod supports this by facilitating peer-to-peer interaction through features such as collaborative activities and discussions. For example, during grammar lessons, students can work together to solve exercises, discuss sentence structures, and provide feedback to one another, all within the Nearpod platform. This interactive element not only reinforces grammatical concepts but also helps students develop their communicative competence in English, which is essential for their overall language proficiency.

Cognitive Theory further complements the use of Nearpod in grammar instruction by focusing on the mental processes involved in learning. Cognitive theorists highlight the importance of understanding how information is processed, stored, and retrieved by learners. Nearpod's design is conducive to promoting cognitive engagement through its variety of content formats and interactive exercises, which cater to different learning styles and cognitive preferences. For instance, visual learners can benefit from the platform's use of images and videos,

while kinesthetic learners can engage with interactive drag-and-drop activities that reinforce grammatical rules. Additionally, Nearpod's immediate feedback feature helps students to quickly identify and correct errors, thereby enhancing their cognitive processing of grammatical structures and reducing the cognitive load associated with learning complex rules.

In addition to these core theories, Multimedia Learning Theory offers another layer of theoretical support for the use of Nearpod in language instruction. According to this theory, learning is more effective when information is presented through multiple channels—such as text, audio, and visual stimuli—simultaneously. Nearpod's ability to integrate multimedia content into grammar lessons aligns with this theory by allowing students to engage with grammar concepts through a combination of written explanations, auditory input, and visual representations. This multimodal approach not only makes learning more engaging but also helps to reinforce grammatical rules by appealing to different sensory modalities, thereby improving retention and understanding.

Lastly, Social Constructivism, which builds on Vygotsky's notion of the Zone of Proximal Development (ZPD), is also relevant to this study. Social Constructivism emphasizes the role of social interaction and collaboration in the learning process, where learners achieve higher levels of understanding through guided interaction with peers and teachers. Nearpod's collaborative features, such as shared boards and group discussions, provide an ideal platform for implementing social constructivist principles in grammar instruction.

3.3. Characteristics of the proposal

The proposed intervention is centered on integrating the Nearpod platform into the English grammar curriculum for A2 level students at CENID, University of Babahoyo. The primary focus of this proposal is to utilize interactive and gamified learning experiences to reinforce grammar concepts, specifically quantifiers and the distinction between countable and uncountable nouns. The proposal is structured around a pre-test and post-test framework to objectively measure student progress and the effectiveness of the Nearpod platform.

The use of Nearpod as an educational tool is designed to enhance engagement and participation in grammar lessons. The proposal emphasizes active learning through digital games and interactive quizzes, which are integrated into the lesson plans. These activities are intended to create a more dynamic and student-centered learning environment, moving away from traditional grammar instruction methods. The proposal also includes a comprehensive feedback mechanism where students can receive immediate responses to their answers, facilitating a deeper understanding of the grammar rules.

3.4. Objectives of the proposal

The primary objective of the proposal is to improve the grammar proficiency of A2 level students by integrating Nearpod into their English language curriculum. Specifically, the proposal aims to:

- Enhance student engagement and motivation through interactive and gamified learning activities.

- Improve students' understanding and application of quantifiers, countable, and uncountable nouns.
- Assess the effectiveness of Nearpod in facilitating grammar instruction through pre- and post-tests.

3.5. Structure, and dynamics of the components of the proposal

The proposal is structured around a sequence of lessons that incorporate Nearpod's interactive tools into the grammar curriculum. The dynamics of the proposal include the following components:

Pre-Test and Introduction: Before the grammar instruction, students participate in a pre-test using Nearpod to assess their initial understanding of quantifiers and noun types. This stage is important for setting a baseline for comparison with post-test results (See Appendix F– Pre Test Lesson Plan).

The Intervention Period: The core of the proposal involves teaching grammar rules using Nearpod's interactive slides and videos. Students then practice these rules through gamified activities on the platform, which are designed to reinforce learning in an engaging way (See Appendix F – Nearpod activities).

Feedback and Q&A Sessions: After each lesson, students are encouraged to ask questions and provide feedback. Nearpod facilitates immediate feedback during practice sessions, allowing students to correct errors and understand the reasoning behind correct answers.

Post-Test and Evaluation: Following the intervention period, a post-test is conducted to measure student improvement. The results of the pre-test and post-test are compared to evaluate the effectiveness of the Nearpod-based instruction (See Appendix F – Post Test Lesson Plan).

3.6. Description of the methodological requirements

The successful implementation of this proposal requires access to the Nearpod platform, which should be available to both students and instructors. Students need devices such as tablets, laptops, or smartphones with internet connectivity to participate in the activities. Instructors must be proficient in using Nearpod's features, including creating interactive slides, quizzes, and games, as well as analyzing student performance data. Additionally, a reliable internet connection is essential to ensure smooth delivery of content and real-time interaction during lessons.

3.7. Results and Discussion

The results were obtained through the approach employed in this research project. This was reflected in the grades obtained in the pre-and post-test and the student surveys analysis.

3.7.1. Intervention results

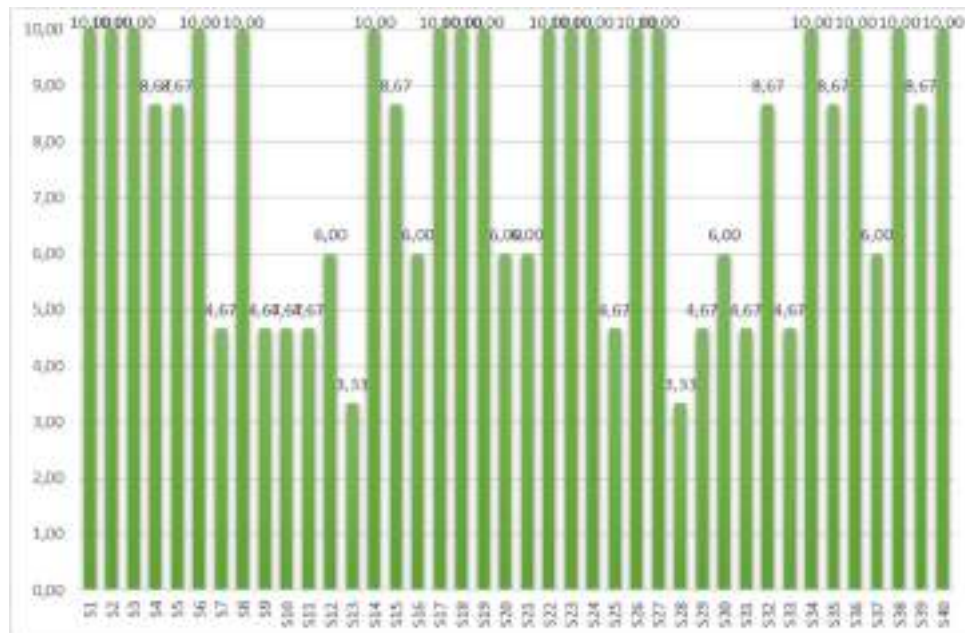
Initially, a Pre-test activity was made, and it was already presented in the last chapter. Then, a Post-test activity was implemented and evaluated with the students' sample.

3.7.1.1. Post-test results

The Post-test results were calculated using a media of the activities that students worked in class, those results are presented in Figure 2:

Figure 2

Students obtained scores in the Post-test activity



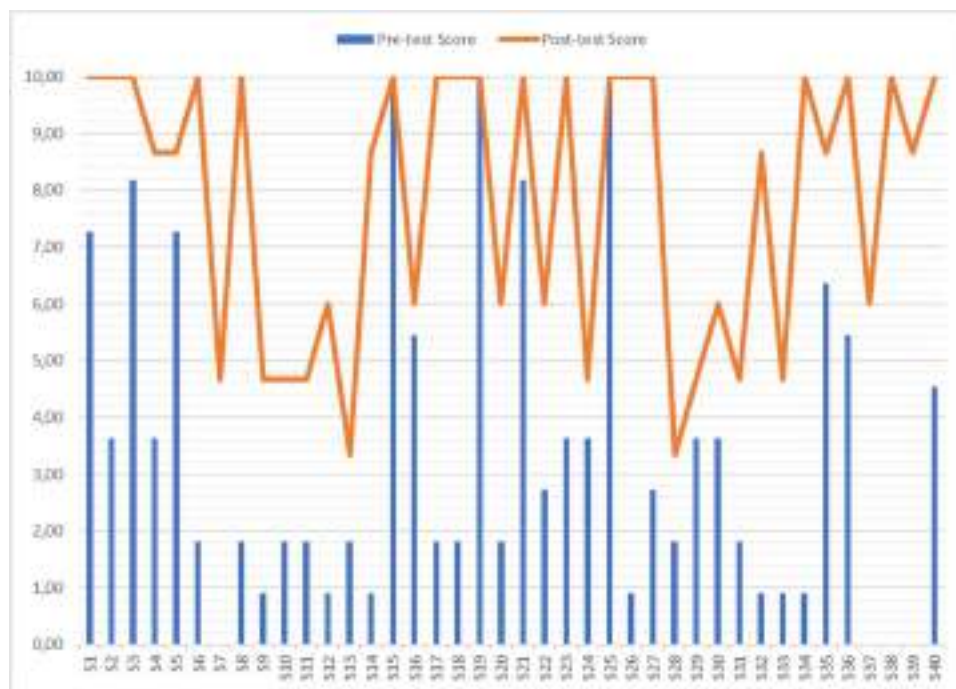
Note. This Figure was elaborated by the Author.

The post-test results reveal a significant improvement in the scores of the students after the intervention. With all 40 participants' scores available and no data lost, the mean post-test score is 7.80. This increase suggests that the intervention had a positive impact on the students' learning outcomes. The standard error of the mean is approximately 0.38, indicating a relatively high precision in the mean score estimate. The standard deviation is 2.43, reflecting moderate variability in the scores, while the variance is 5.88, further illustrating the spread of scores around

the mean. These statistics suggest that, while most students benefited from the intervention, there was still some variation in individual performance improvements. Then, a comparison among Pre and Post Test results were calculated, those results are presented in Figure 3:

Figure 3

Comparison of the scores in the Pre and Post-test activities



Note. This Figure was elaborated by the Author.

Comparing the overall results, the pre-test mean score was 3.36, whereas the post-test mean score increased substantially to 7.80. This significant rise in the mean score highlights the overall improvement in students' performance. On the other hand, Table 3 presents the statistics of the Post-test obtained from students' scores.

Table 3*Post-test statistic based on Scores of the A2-Level students*

		Intervention
N	Valid	40
	Lost	0
Mean		7.80
Standard error of mean		0.38
St. Deviation		2.43
Variance		5.88

Note. This table was elaborated by the Author.

The standard error of the mean for the pre-test was 0.47, compared to 0.38 for the post-test, indicating a more precise estimate of the post-test mean. The standard deviation decreased from 2.96 in the pre-test to 2.43 in the post-test, suggesting that the students' scores became more consistent after the intervention. The variance also decreased from 8.73 to 5.88, reinforcing the observation that the intervention not only improved the average performance but also reduced the variability in students' scores. Then, Table 4 analyze the differences among pre and post-tests.

Table 4*Pre- and Post-test comparison*

Value	Mean	Standard Deviation
Pre-test	3,33	2,97

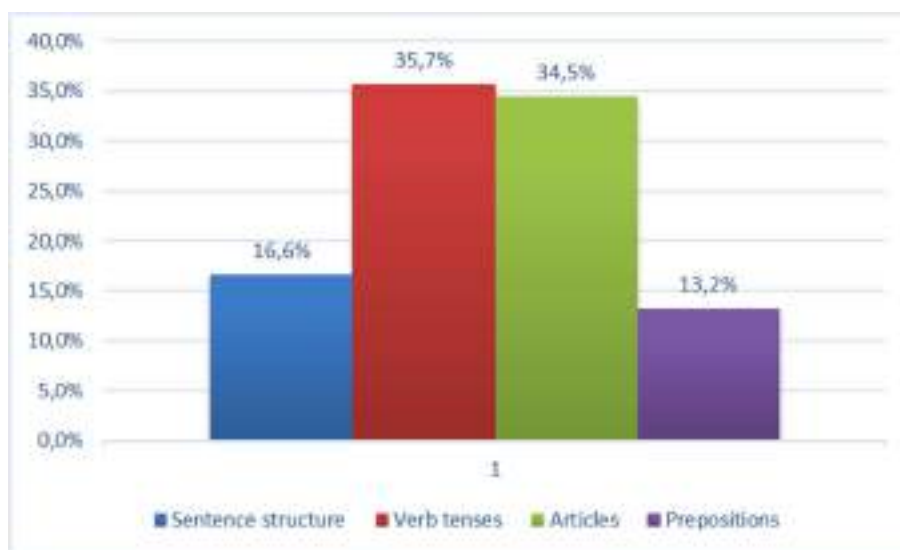
Post-test	7,8	2,43
Difference	4,47	-0,54
% Increase	57,31%	

Note. This table was elaborated by the Author.

As it is noted on Table 4, the differences are high among pre- and post-test, due to Nearpod intervention in the course of the study. In the pre-test the mean is 3,33 and St. Dev. 2,97, while in post-test it was obtained a mean of 7,8 and St. Dev. of 2,43 giving a difference of 4,46 points in the student's average grades, and increasing the grades in 57,31%. On the other hand, Figure 4, presents the aspects where students consider they have improved during the intervention:

Figure 4

Aspects of improvement according to students



Note. This Figure was elaborated by the Author.

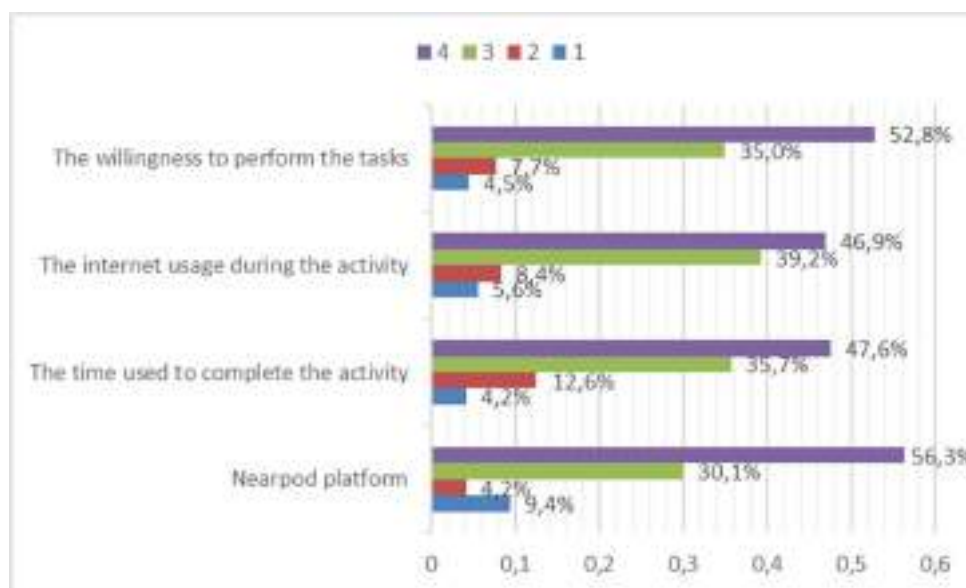
According to Figure 4, students consider they have most improved when using verb tenses (35.7%) and Articles (34.5%), however, sentences structure (16.6%) and prepositions got a minor response.

3.7.2. Students' perception

Continuing with the analysis, a semi-structured questionnaire was carried out with a broader sample, 132 students that also experienced the use of Nearpod, together with the control group prior showed. Thus, students value their perceptions about the platform, Figure 5 presents this information in detail:

Figure 5

Perception of students about Nearpod usage



Note. This Figure was elaborated by the Authors.

The majority of students rated the Nearpod platform positively, with 56.3% giving it the highest rating (4) and 30.1% giving it a 3. The mean rating is 3.33 with a standard deviation of 0.94 (See Table 4), indicating a generally favorable view of

the platform, though there is some variability in responses. Additionally, the time taken to complete activities was also rated relatively highly, with 47.6% of respondents giving it a 4 and 35.7% giving it a 3. The mean rating is slightly lower at 3.26, with a standard deviation of 0.84, suggesting that while most students were satisfied with the time required, there was some minor dissatisfaction. Table 4, complement this Figure.

Table 5

Perception of students about Nearpod usage

Aspects	Mean	Standard Deviation
Nearpod platform	3,33	0,94
The time used to complete the activity	3,26	0,84
The internet usage during the activity	3,27	0,84
The willingness to perform the tasks	3,36	0,81

Note. This table was elaborated by the Author.

According to Figure 5, similar to the time factor, internet usage was rated positively, with 46.9% of respondents rating it a 4 and 39.2% a 3. The mean rating here is 3.27, with a standard deviation of 0.84, indicating consistent satisfaction with internet usage during Nearpod activities. Consequently, verb tenses received the highest mean rating of 3.36, with 52.8% of students giving it a 4, reflecting a strong willingness among students to engage in the tasks provided via Nearpod. The lower standard deviation of 0.81 indicates more consistent responses in this area. Then, Table 6, present students' perception about the integration of Nearpod in your English grammar classes.

Table 6

Perception about the integration of Nearpod in your English grammar classes

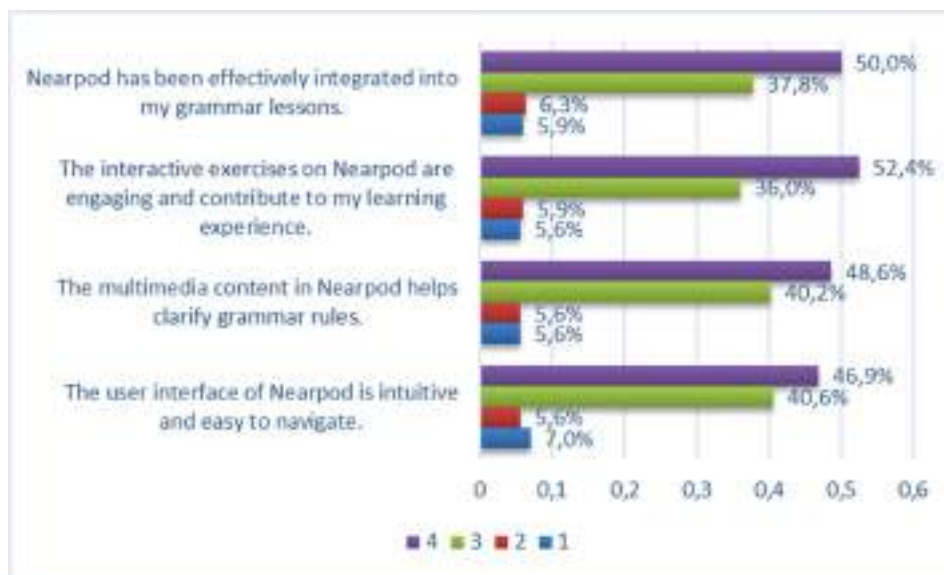
Statement	Mean	Standard Deviation
The user interface of Nearpod is intuitive and easy to navigate.	3,27	0,86
The multimedia content in Nearpod helps clarify grammar rules.	3,31	0,82
The interactive exercises on Nearpod are engaging and contribute to my learning experience.	3,35	0,83
Nearpod has been effectively integrated into my grammar lessons.	3,31	0,84

Note. This table was elaborated by the Author.

According to Table 6, the user interface of Nearpod received generally favorable feedback, with 46.9% strongly agreeing that it is intuitive and easy to navigate, and 40.6% agreeing. The mean rating is 3.27, and the standard deviation is 0.86, suggesting that while most students found the interface easy to use, a small portion had some difficulties. Also, the multimedia content was rated positively, with a mean of 3.31 and a standard deviation of 0.82. A combined 88.8% of students agreed or strongly agreed that multimedia content helped clarify grammar rules, indicating strong support for this feature of Nearpod. Figure 7 supports also Table 6 with pertinent information of this integration.

Figure 6

Perception about the integration of Nearpod in your English grammar classes

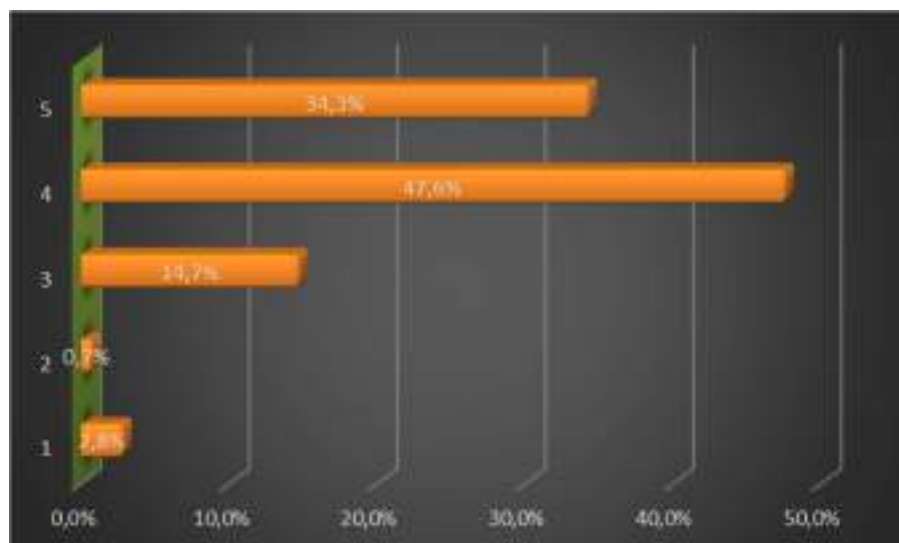


Note. This Figure was elaborated by the Authors.

According to Figure 6, the interactive exercises were highly rated, with 52.4% strongly agreeing and 36.0% agreeing that they are engaging and contribute positively to the learning experience. The mean rating is 3.35, with a standard deviation of 0.83, showing that students generally found these exercises beneficial and engaging. Integration of Nearpod: The overall integration of Nearpod into grammar lessons was viewed positively, with 50.0% strongly agreeing and 37.8% agreeing that it has been effective. The mean rating is 3.31, with a standard deviation of 0.84, reflecting a solid endorsement of Nearpod's role in the classroom, though a small percentage of students might have reservations. Finally, students graded their experience with Nearpod usage obtaining a Mean of 4,1 under 5, Figure 7 exposes the whole results:

Figure 7

Student's Level of Satisfaction with Nearpod



Note. This Figure was elaborated by the Authors.

Most of the students graded the level of satisfaction in a scale of 4 and 5 points, approximately 34,3% are highly satisfied with the platform giving a grade of 5 points and 47,6% graded it with 4 points. A minor quantity of students grade the platform with 2 points (0.7%) and 1 point (2.8%), consequently, they have a positive perception of the platform translated through the highest levels of satisfaction expressed.

3.7.3. Discussion

The data presented in Table 4 reveal a significant improvement in students' performance following the Nearpod intervention in their English grammar classes. The pre-test mean score of 3.33 with a standard deviation of 2.97 indicates that before the intervention, students' understanding of the material was relatively low and highly variable. However, after the integration of Nearpod, the post-test mean

score increased dramatically to 7.8, with a reduced standard deviation of 2.43. This improvement translates to a 4.47-point increase in the average scores and a substantial 57.31% increase in performance, showcasing the effectiveness of Nearpod in enhancing student outcomes.

This improvement aligns with findings from previous studies which suggest that the use of interactive and engaging educational tools, such as Nearpod, can significantly boost students' comprehension and retention of complex concepts (Clark & Mayer, 2016). The reduction in standard deviation from pre-test to post-test suggests that not only did overall performance improve, but the variance in student performance also decreased, indicating a more consistent level of understanding across the student cohort.

Continuing with the analysis of students' perceptions, the majority of respondents rated the Nearpod platform positively, with 56.3% giving it the highest possible rating of 4 (Table 5). This positive reception is further supported by the mean score of 3.33, accompanied by a standard deviation of 0.94, suggesting that while most students found the platform beneficial, there was some variability in their experiences. This is consistent with the general trend seen in educational technology adoption, where students often express satisfaction with platforms that are user-friendly and enhance their learning experiences (Selwyn, 2016).

Regarding the specific aspects of Nearpod usage, the time required to complete activities, the internet usage during the activities, and the students' willingness to perform tasks were all rated favorably, with mean scores ranging

from 3.26 to 3.36. The relatively low standard deviations (ranging from 0.81 to 0.84) suggest that students' experiences were fairly consistent, reinforcing the platform's reliability and effectiveness in a classroom setting.

Table 6 further details students' perceptions of Nearpod's integration into their grammar lessons. The user interface of Nearpod was deemed intuitive by most students, with a mean score of 3.27 and a standard deviation of 0.86, indicating that the platform is generally accessible, though a small subset of students may have faced challenges. Additionally, the multimedia content within Nearpod was well-received, with a mean score of 3.31 and a low standard deviation of 0.82, confirming that multimedia elements effectively clarified grammar rules—a key advantage of integrating technology into language learning (Mayer, 2009).

The interactive exercises on Nearpod, which are a central feature of the platform, were highly rated by students, with a mean score of 3.35 and a standard deviation of 0.83. This aligns with the pedagogical benefits of interactivity in learning, which has been shown to enhance engagement and deepen understanding (Chi, 2009). The overall integration of Nearpod into grammar lessons was also viewed positively, with a mean score of 3.31 and a standard deviation of 0.84, reflecting a strong endorsement of the platform's role in the classroom.

Lastly, the students' overall satisfaction with Nearpod, as depicted in Figure 7, shows that a significant proportion of students (81.9%) rated their satisfaction as 4 or 5 out of 5, further substantiating the platform's positive impact on their learning experience. These findings are consistent with the broader literature on educational

technology, which highlights the importance of student satisfaction in the successful adoption and long-term use of such tools in educational settings (Davis, 1989).

To sum up, the results from this study underscore the efficacy of Nearpod as a tool for enhancing student performance and satisfaction in English grammar classes. The significant improvements observed in test scores, coupled with the overwhelmingly positive feedback from students, suggest that Nearpod is a valuable asset in modern language instruction, capable of transforming traditional learning environments into dynamic, interactive spaces that promote deeper understanding and engagement.

3.8. Limitations

Despite the positive findings regarding the effectiveness of Nearpod in enhancing students' grammar skills and their overall satisfaction with the platform, several limitations should be considered when interpreting these results.

- The study was conducted with a specific cohort of students from a single institution, which may limit the generalizability of the findings to other educational contexts. The sample size, while sufficient for preliminary analysis, may not fully represent the diversity of student experiences across different schools or educational settings. A larger and more diverse sample could provide a more comprehensive understanding of Nearpod's impact.
- The intervention period was relatively short, which may not capture the long-term effects of using Nearpod on students' grammar learning. Long-

term studies are needed to assess whether the improvements in test scores and student satisfaction are sustained over time.

- The study relied on self-reported data from student questionnaires, which can be subject to biases. Students' perceptions of Nearpod might have been influenced by their recent experiences with the platform or by their desire to provide positive feedback. The absence of objective measures, such as direct observation or third-party assessments, limits the ability to confirm that students' self-reported satisfaction aligns with actual usage patterns and effectiveness.
- While the study did include a control group, the absence of random assignment to treatment and control conditions introduces the possibility of selection bias. Students who were more motivated or interested in using educational technology might have been more likely to participate in the Nearpod intervention, which could skew the results.
- The implementation of Nearpod may have varied across different classrooms or instructors, which could affect the consistency of the intervention. Variations in how the platform was used, including differences in instructional strategies or levels of teacher familiarity with the tool, might influence the outcomes and contribute to variability in students' experiences.
- Although the study aimed to assess students' perceptions of internet usage and technological functionality, unforeseen technical issues or limitations with the platform could have impacted the effectiveness of the intervention.

These issues might not have been fully accounted for in the study, potentially affecting the reliability of the results.

- The focus of the study was primarily on grammar instruction, which limits the scope of the findings to this specific aspect of language learning. Future research could explore the effectiveness of Nearpod across a broader range of language skills and subjects to determine its overall impact on educational outcomes.

Overall, while the study provides valuable insights into the benefits of Nearpod for grammar instruction, addressing these limitations in future research will be important for obtaining a more dynamical understanding of the platform's effectiveness and potential areas for improvement.

Conclusions

The study target is was to assess the effectiveness of Nearpod as a gamification tool in enhancing English grammar learning among A2 level students at the University of Babahoyo. The first objective was to explore the impact of Nearpod's gamified lessons on student engagement levels during English grammar instruction. The post-test results revealed a significant improvement in the scores of the students after the intervention. With all 40 participants' scores available and no data lost, the mean post-test score is 7.80. This increase suggests that the intervention had a positive impact on the students' learning outcomes. The standard error of the mean is approximately 0.38, indicating a relatively high precision in the mean score estimate. The standard deviation is 2.43, reflecting moderate variability in the scores, while the variance is 5.88, further illustrating the spread of scores around the mean. These statistics suggest that, while most students benefited from the intervention, there was still some variation in individual performance improvements.

The second objective was to analyze the influence of Nearpod's gamification features on student motivation in learning English grammar.

According to the student's perceptions the user interface of Nearpod received generally favorable feedback, they were strongly agreeing that it is intuitive and easy to navigate, also most students found the interface easy to use and the multimedia content was rated positively, students agreed that it helped clarify grammar rules, indicating strong support for this feature of Nearpod.

The third objective was to measure the improvement in English grammar proficiency among A2 level students following the use of Nearpod as a gamification tool. Comparing the overall results, the post-test scores increased substantially. This significant rise in the mean score highlights the overall improvement in students' performance, also the scores became more consistent after the intervention reinforcing the observation that the intervention not only improved the average performance but also reduced the variability in students' scores.

In conclusion, the central concern of this thesis is about whether Nearpod as a gamification tool can be effective to English grammar learning as A2 students at university de Babahoyo. Through the use of interactive multimedia, collaborative exercises and real -time feedback, Nearpod helped encourage students to take more interest in their learning activities while significantly improving grammar proficiency. This study will therefore add to the expanding area of research in integrating technology into language teaching and impact practice for educators wishing to enhance their use of online grammar instruction.

Recommendations

As a recommendation for the English teachers of the institution is that they should apply Nearpod platform because it is a nice and joyful way to teach English to build up the understanding of grammar and language patterns in a practical way to acquire the foreign language sharing tasks with classmates' participation.

It is recommended that teachers apply this type of exercises because students can evaluate some topics, since they involve tasks that increase their creativity to solve tasks to learn English and improve the grammar skills through different gamification exercises. Also, it is suggested that teachers motivate students to use the platform asynchronously so that they could reinforce the topics learned and practiced during class

Finally, research should continue on the advantages of using this application since they can be used to develop other skills such as writing and speaking, since Nearpod provides options such as writing sentences, paragraphs, stories from their diary, among others. It also allows them to record videos and audios which will help improve speaking.

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UNIVERSIDAD BOLIVARIANA DEL ECUADOR
ANEXO II

**"PLAN DE INVESTIGACIÓN PARA LA TESIS, QUE DEBERÁ SER REVISADO Y
APROBADO POR LA COMISIÓN DE TITULACIÓN DE CADA PROGRAMA AL
CONCLUIR EL TALLER I"**

TITLE OF THE THESIS: The use of Nearpod as a tool in teaching English grammar to EFL University students.

AUTHOR I: Erika Yessenia Mora Herrera

RESEARCH CONTEXT: EFL Students of the University of Babahoyo

1. Brief analysis and description of the situation that justifies the presentation of this proposal.

In recent years, the use of technology in education has resulted in important changes to teaching approaches across a variety of disciplines, including language learning. Educators, particularly in English as a Foreign Language (EFL), are increasingly investigating innovative techniques to engage and improve learning results among university students. Gamification is one such strategy that is gaining attention, as it uses game design aspects in non-game environments to inspire and stimulate learners.

This thesis explores the application of Nearpod as a gamification tool in teaching English grammar to A2-level students at the University of Babahoyo. Nearpod is a multimedia educational platform that enables teachers to create interactive lessons incorporating quizzes, polls, videos, and simulations, thereby improving active student participation and personalized learning experiences. By using gamified elements such as points, leaderboards, and challenges within Nearpod lessons, instructors aim to create a dynamic and motivating learning environment for grammar acquisition.

Considering that grammar instruction often necessitates a balance between explicit rules and meaningful practice, requiring innovative strategies to sustain student engagement and comprehension. Gamification, as implemented through platforms like Nearpod, holds promise in addressing these challenges by enhancing student motivation, promoting active learning, and providing immediate feedback—all crucial factors in language acquisition (Deterding, Dixon, Khaled, & Nacke, 2011; Hamari, Koivisto, & Sarsa, 2014).

Furthermore, the University of Babahoyo serves as a relevant context for this research due to its commitment to enhancing teaching practices and improving student learning outcomes in EFL education. By investigating the effectiveness of Nearpod as a gamification tool specifically tailored to the needs of A2 level students, this study aims to contribute empirical evidence to the growing body of literature on gamified learning environments in language education.

This thesis explores the potential of Nearpod as a gamification tool in teaching English grammar to EFL university students at the A2 level. By examining its impact on student engagement, motivation, and grammar proficiency, this research seeks to inform pedagogical practices and contribute to the ongoing discourse on effective language teaching methodologies.

However, this problem statement is grounded in the belief that addressing these challenges requires an innovative approach. Concurrently, the integration of the Nearpod App into the pedagogical framework is justified by its capacity to identify and address specific grammar weaknesses, aligning with the unique needs of students from both urban and rural backgrounds. Then, the question that guides this research is: "How does the implementation of the Nearpod App impact the development of grammar skills among A2-level students at the Language Center of the University of Babahoyo?"

2. Statement of the problem

The challenge of effectively teaching English grammar to EFL (English as a Foreign Language) students, particularly those at the A2 level, has been a persistent issue in language education. A2 level learners, according to the Common European Framework of Reference for Languages (CEFR), are at a basic proficiency stage where they can understand and use simple sentences and expressions related to familiar topics. However, these students often struggle with grasping the complexities of English grammar, which requires not only understanding the rules but also applying them correctly in various contexts.

Traditional teaching methods, which often rely on rote memorization and repetitive exercises, have been found to be insufficient in sustaining student engagement and fostering meaningful learning. The lack of motivation, coupled with the monotonous nature of grammar instruction, can lead to low participation rates, reduced comprehension, and ultimately, poor academic outcomes. This problem is particularly pronounced in the context of the University of Babahoyo, where students come from diverse backgrounds, including urban and rural areas, each bringing their own set of challenges and learning needs.

The core issue this research seeks to address is the inefficacy of traditional grammar teaching methods in engaging A2 level EFL students at the University of Babahoyo, leading to suboptimal grammar acquisition and retention. Despite the efforts made by educators to improve grammar instruction, students at this proficiency level often find grammar lessons unengaging and difficult to relate to real-life language use. This disengagement can result in students failing to achieve the desired levels of grammar proficiency, which is essential for advancing their overall English language skills.

The implementation of technology-driven solutions, such as Nearpod, which incorporates gamification elements, presents a potential solution to this problem. However, there is a lack of empirical research specifically investigating the effectiveness of such tools in the context of EFL grammar instruction for A2 level students. Thus, the central research question emerges: "How does the implementation of the Nearpod App impact the development of grammar skills among A2-level students at the Language Center of the University of Babahoyo?"

3. Justification of the research

This research is justified by the pressing need to enhance the effectiveness of English grammar instruction for A2 level EFL students, particularly within the context of the University of Babahoyo. Given the diverse educational backgrounds of the students, with many hailing from rural areas where access to quality language education may be limited, there is a critical need for innovative teaching approaches that can bridge these

gaps. The integration of Nearpod as a gamification tool is supported by its ability to create interactive and engaging learning experiences, which are essential for maintaining student interest and motivation in grammar lessons. Gamification has been shown to enhance learning outcomes by making educational content more engaging and accessible, thereby increasing student participation and retention rates (Hamari, Koivisto, & Sarsa, 2014). Moreover, the use of technology in education aligns with global trends toward digital learning, making this research relevant not only within the local context of Babahoyo but also in broader discussions on the future of language education. By providing empirical evidence on the effectiveness of Nearpod in improving grammar proficiency, this study aims to contribute to the body of knowledge on EFL teaching methodologies, offering practical insights for educators and policy-makers seeking to enhance language education practices.

4. Description of the relationship between the proposal and the research lines of the university

The selected thesis topic, which explores the use of Nearpod as a gamification tool in teaching English grammar to A2-level students, is closely aligned with the research lines of the Universidad Bolivariana del Ecuador. This research falls under the university's broader commitment to innovative educational methodologies and the enhancement of learning through technology. The university has emphasized the need for integrating cutting-edge digital tools in its educational framework, particularly those that can improve student engagement and learning outcomes in language acquisition.

This proposal specifically addresses the university's focus on developing and applying technology-enhanced learning environments that cater to the diverse needs of its student population. By examining how Nearpod, as an interactive and gamified platform, can be utilized to enhance English grammar instruction, the research contributes directly to the university's strategic goal of leveraging digital tools to advance educational practices. The emphasis on gamification aligns with the university's research line that promotes dynamic, student-centered learning environments. Furthermore, the study's focus on improving the educational experiences of A2-level students, many of whom come from both urban and rural backgrounds, supports the university's mission to provide equitable and quality education to all its students.

In essence, this thesis not only aligns with the Universidad Bolivariana del Ecuador dedication to innovative pedagogy but also extends its research focus by providing empirical evidence on the practical application of Nearpod in the classroom. This research is poised to offer valuable insights that can be scaled and adapted to other educational contexts, thereby contributing to the university's broader educational objectives.

5. Description of the research object

Grammar improvement through the Nearpod platform.

6. Research aim

To assess the effectiveness of Nearpod as a gamification tool in enhancing English grammar learning among A2-level students at the University of Babahoyo.

7. Specific research objectives

- To explore the impact of Nearpod's gamified lessons on student engagement levels during English grammar instruction.
- To analyze the influence of Nearpod's gamification features on student motivation in learning English grammar.
- To measure the improvement in English grammar proficiency among A2-level students following the use of Nearpod as a gamification tool.

8. Description of the conceptual and operational categories (independent variable & dependent variable)

The independent variable in this research is the application of Nearpod as a gamification tool in teaching English grammar. Conceptually, Nearpod is an educational platform that allows teachers to design and implement interactive, multimedia-rich lessons that engage students through gamified elements such as quizzes, polls, and interactive activities. The use of these elements is intended to create a more engaging and motivating learning environment, particularly for A2-level EFL students, who may struggle with traditional grammar instruction. Operationally, this variable will be measured by the frequency and types of Nearpod features used in the classroom, as well as student interaction data generated by the platform.

The first dependent variable is the English grammar proficiency of A2-level students. Conceptually, grammar proficiency refers to the students' ability to accurately use and understand English grammar rules in various contexts, including both written and spoken communication. Operationally, this variable will be assessed through pre-test and post-test grammar assessments, error analysis in student writing and speaking, and student self-assessments. The aim is to determine whether the use of Nearpod as a gamification tool leads to measurable improvements in students' grammar skills.

The second dependent variable is student engagement and motivation. Engagement refers to the level of active participation, attention, and involvement that students demonstrate during grammar lessons, while motivation pertains to the intrinsic drive to learn and improve their language skills. Operationally, engagement will be measured by tracking attendance, participation rates, and classroom behavior during Nearpod lessons. Motivation will be assessed through student surveys, feedback forms, and teacher observations, both before and after the implementation of the Nearpod-based lessons. This variable is crucial as it will help determine whether the gamification elements in Nearpod have a significant impact on students' willingness to learn and their overall experience in the grammar lessons.

9. Description of the research approaches and methodologies to be used

The research will adopt a mixed-methods approach, combining both quantitative and qualitative methodologies to provide a comprehensive analysis of the effectiveness of Nearpod as a gamification tool in teaching English grammar to A2-level students at the University of Babahoyo. The mixed-methods approach is particularly suitable for this study as it allows for the triangulation of data, providing both numerical evidence of changes in grammar proficiency and a deeper understanding of student engagement and motivation.

The quantitative aspect of the research will primarily involve a pre-test and post-test design. This will be used to measure the impact of Nearpod on students' grammar proficiency. Fifty A2-level students from the University of Babahoyo will participate in this component of the study. The pre-test will assess students' initial grammar knowledge, serving as a baseline. After the intervention, which consists of a series of grammar lessons delivered through Nearpod, a post-test will be administered to evaluate any changes in grammar proficiency. Statistical analysis will be conducted to compare the pre-test and post-test results, determining the effectiveness of the Nearpod intervention.

The qualitative component will focus on understanding students' perceptions and experiences with Nearpod, as well as their engagement and motivation levels. This will be explored through surveys administered to a larger sample of 250 students, encompassing a broader range of perspectives. Additionally, qualitative data will be collected through teacher observations and feedback forms to capture the nuances of classroom dynamics and student interaction with the gamified content. The qualitative data will be analyzed thematically to identify recurring themes and patterns that explain the quantitative findings, providing richer insights into the efficacy of Nearpod as a teaching tool.

10. Description of the research instruments

Pre-Test: The pre-test will consist of a grammar proficiency test tailored to the A2 level, covering key grammatical concepts that the students are expected to know at this stage. The test will be designed to evaluate students' understanding and application of English grammar rules in both written and oral formats. This test will serve as a baseline to measure the students' initial grammar skills before the intervention.

Intervention Using Nearpod: Over the course of four weeks, the 50 students will participate in grammar lessons delivered via Nearpod. These lessons will include interactive activities such as quizzes, polls, and simulations that are designed to reinforce grammar concepts in an engaging manner. Each Nearpod session will focus on different aspects of grammar, ensuring comprehensive coverage of the A2 curriculum.

Post-Test: Following the Nearpod intervention, students will take a post-test similar in structure to the pre-test. This test will measure the same grammatical concepts to assess any improvements in the students' proficiency. The results of the post-test will be compared with the pre-test scores to determine the effectiveness of the Nearpod-based lessons.

Student Perception Survey: The survey will be administered to 250 students who have experienced Nearpod-based grammar lessons, including the 50 students who participated in the pre-test and post-test study. The survey will include both closed-ended questions, using Likert scales to gauge student perceptions of engagement, motivation, and overall satisfaction with the Nearpod lessons, and open-ended questions to capture detailed feedback on their learning experiences.

Survey Implementation: The survey will be distributed electronically to ensure wide participation. Students will be asked to reflect on their experiences with Nearpod, specifically how the gamification elements influenced their learning of English.

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APPENDIX C

Description: The following email was received to inform the Tutor designation and the documents signed accepting the tutor designation



NO	ESTU	APellidos (Apellido de la madre y el primer apellido)	FECHA DE DESIGNACIÓN
1	MICHAEL CHAVEZ	CHAVEZ MICHAEL CHAVEZ	2020/05/05
2	MICHAEL CHAVEZ	CHAVEZ MICHAEL CHAVEZ	2020/05/05
3	MICHAEL CHAVEZ	CHAVEZ MICHAEL CHAVEZ	2020/05/05
4	MICHAEL CHAVEZ	CHAVEZ MICHAEL CHAVEZ	2020/05/05

APPENDIX F

Description: This appendix contains the lesson plans used for the Proposal. Two for the Pre-test and Post-test, and two for the objectives and activities for each group.

Lesson Plan for Pre-test

Institution: University of Babahoyo

Students: Level 2 (A-2students)		Date: June 24 th , 2024	
Topic: Quantifiers, countable and uncountable nouns			
Objective: Help students understand the grammatical rules for using quantifiers in sentences, questions, and negative statements, improving their grammar skills			
Stage	Interaction	Procedure or Activity	Timing
Before to present the grammar explanation, I showed them a vocabulary about cooking verbs, countable and uncountable nouns	TTS	Cooking verbs vocabulary 	15 minutes
		I presented a list about cooking verbs to introduce the lesson. Quantifiers definition: I explained them the definition and how can use the quantifiers according with the countable and uncountable nouns.	
			
Grammar explanation	TTS	I used slides to explained the grammar rules to use the quantifiers then I showed them a video to reinforce the topic.	

			
Pre-test Activity	TTS	• Present a game activity in which they could find some pictures and they had to choose the correct option. • Present a quiz to practicing the correct use of quantifiers	30 minutes
		Start the practice using the Nearpod App.	
Q&A and Feedback	TTS	Invite questions and gather feedback.	15 minutes
Evaluation process	TTT	Review the process in the platform	2 hours
		Grade students' grammar practice	

Lesson Plan for Post-test

Institution: University of Babahoyo

Students: Level 2 (A-2 students)		Date: August 2 nd , 2024	
Topic: Games – Focus on grammar skills			
Objective: Measure students’ improvement and advancements using Nearpod App platform during the intervention period.			
Stage	Interaction	Procedure or Activity	Timing
Introduction	TTS	Greet participants.	15 minutes
		Give general feedback on the intervention period.	
Post-test Activity	TTS	Present the games for the post-test activity.	30 minutes
		Students practice grammar by using different games on the Nearpod App.	
Q&A and Feedback	TTS	Invite questions and gather feedback.	15 minutes
Evaluation process	TTT	Review the process in the platform	2 hours
		Grade students according to the grammar practice that they did on Nearpod.	

Instrument(s) to be validated.

Annex 1: Pre-test

Objective: To assess students' English grammar skills, specifically focusing on the A2 level students of University of Babahoyo.
Instructions: Practice the grammar activities by following the instructions carefully. Use quantifiers and countable and uncountable nouns.
Teacher: Erika Mora Herrera
Class: Level 2 - Basic 1

<https://app.nearpod.com/?pin=hb4pn>



Lesson Plan for Pre-test

Institution: University of Babahoyo

Students: Level 2 (A-2students)		Date: June 24 th , 2024	
Topic: Quantifiers, countable and uncountable nouns			
Objective: Help students understand the grammatical rules for using quantifiers in sentences, questions, and negative statements, improving their grammar skills			
Stage	Interaction	Procedure or Activity	Timing
Before to present the grammar explanation, I showed them a vocabulary about cooking verbs, countable and uncountable nouns	TTS	Cooking verbs vocabulary  I presented a list about cooking verbs to introduce the lesson.	15 minutes
		Quantifiers definition: I explained them the definition and how can use the quantifiers according with the countable and uncountable nouns.	

			
Grammar explanation	TTS	I used slides to explained the grammar rules to use the quantifiers then I showed them a video to reinforce the topic. 	
Pre-test Activity	TTS	• Present a game activity in which they could find some pictures and they had to choose the correct option. • Present a quiz to practicing the correct use of quantifiers	30 minutes
		Start the practice by using the Nearpod App.	
Q&A and Feedback	TTS	Invite questions and gather feedback.	15 minutes
Evaluation process	TTT	Review the process in the platform	2 hours
		Grade students' grammar practices.	

IdcAnnex 2: Post test

Objective: To assess students' English grammar skills, specifically focusing on the A2 level students of University of Babahoyo.

Instructions: Practice the grammar activities by following the instructions carefully, use the future simple

Teacher: Erika Mora Herrera

Class: Level 2 - Basic 1

<https://app.nearpod.com/?pin=u8gqh>



Lesson Plan for Post-test

Institution: University of Babahoyo

Students: Level 2 (A-2 students)
 Date: August 2nd, 2024

Topic: Games – Focus on grammar skills

Objective: Measure students' improvement and advancements using Nearpod App platform during the intervention period.

Stage	Interaction	Procedure or Activity	Timing
Introduction	TTS	Greet participants.	15 minutes
		Give general feedback on the intervention period.	
Post-test Activity	TTS	Present the games for the post-test activity.	30 minutes
		Students practice grammar by using different games on the Nearpod App.	
Q&A and Feedback	TTS	Invite questions and gather feedback.	15 minutes
Evaluation process	TTT	Review the process in the platform	2 hours
		Grade students according to the grammar practice that they did on Nearpod.	

APPENDIX H

Description: This Appendix presents a semi-structured questionnaire to evaluate students' perceptions and satisfaction.

Informed Consent

This questionnaire is intended for English students of the Technical University of Babahoyo and aims to analyze the perceptions and usage of Nearpod in grammar instruction. All information is confidential and will be used for academic purposes. The estimated time for completing the survey is 15 minutes. Do you agree to proceed with the survey?

☐ Yes ☐ No

Section I: General Information

1. Age: _____
2. Gender:

☐ Male
 ☐ Female
 ☐ Other
3. City where you live: _____
4. Career: _____
5. Semester: _____

Section 2: Using TTS Nearpod

6. How were your initial impressions of the Nearpod platform for learning grammar?

☐ Positive
 ☐ Negative
7. Did your first impressions change over the course of the intervention?

☐ Yes
 ☐ No
8. If so, in what ways? _____
9. Please rate the usage of Nearpod in your English grammar classes. Consider that 4 is the highest level, while 1 is the lowest.

AI Tool	1	2	3	4
1. The platform (Nearpod)				
2. The time used to complete the activity				
3. The internet usage during the activity				
4. The willingness to perform the tasks				

Section 3: User Experience and Perceptions

10. Did you experience any anxiety or nervousness before or during the Nearpod activities?

☐ Yes ☐ No

11. Reflecting on the period of using Nearpod, how would you rate your perceived improvement in English grammar?

☐ Much better ☐ Somehow better ☐ Same ☐ Worst

12. What specific aspects of grammar do you believe have improved the most?

☐ Sentence structure ☐ Verb tenses ☐ Articles ☐ Prepositions

13. Did you find the Nearpod activities compatible with your study routine?

☐ Yes ☐ No

14. Did you encounter any specific challenges or strengths during the use of the Nearpod platform? (Select all that apply)

☐ technical difficulties ☐ lack of familiarity with the platform

☐ increased engagement ☐ interactive features ☐ Neither

15. Please rate your level of agreement with the following statements regarding the integration of Nearpod in your English grammar classes.

Consider 4: strongly agree, 3: agree, 2: disagree, 1: strongly disagree.

Statement	1 - strongly disagree	2 – disagree	3- agree	4 – strongly agree
1. The user interface of Nearpod is intuitive and easy to navigate.	☐	☐	☐	☐

2. The multimedia content in Nearpod helps clarify grammar rules.	☐	☐	☐	☐
3. The interactive exercises on Nearpod are engaging and contribute to my learning experience.	☐	☐	☐	☐
4. Nearpod has been effectively integrated into my grammar lessons.	☐	☐	☐	☐

16. On a scale from 1 to 5, how satisfied are you with your overall experience with Nearpod in learning grammar?

Statement	1	2	3	4	5
My satisfaction level is:					

17. What factors contributed most to your satisfaction or dissatisfaction?

APPENDIX I

Description: Pictures of the training made on the virtual class on University of Babahoyo with the EFL students of the Language Center (CENID).